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An Address.[1]

THE LIFE AND WORK OF DR. ESAU.

By R. L. THOROLD GRANT,

Retiring President of the South Australian Branch of the British Medical Association.

IN tendering to the members of the British Medical Association in South Australia my thanks for and appreciation of their confidence in electing me to the high office of President for the past year, I now follow the usual custom of delivering an address, a task by no means the least in difficulty of several which I have performed during my term of office.

The search for a suitable subject has not been easy, for the matter should be one of general interest. For that reason I have decided that my theme shall be historical, and in making that choice I have been guided by the general interest shown in historical papers I have heard delivered in the past and by my own feeling that historical papers make the best general reading in THE MEDICAL JOURNAL OF AUSTRALIA.

The germ of the idea was sown in my mind by Dr. Clifford Jungfer, of Lobethal. I propose to tell you something of the life and work of a doctor who served the people in a country district in South Australia in many capacities truly and faithfully for a period of fifty years.

[1] Read at the annual meeting of the South Australian Branch of the British Medical Association on June 25, 1952.

I shall start by showing you a photograph of him, taken in his later years, and regarded as a good likeness. Most of you will not know who this is, and when I reveal his name many of you will have never heard of it. I propose to rectify this state of affairs and I hope to hold your attention whilst I take you with me into the past.

Hermann Charles Frederick Esau was born at Arolson, Duchy of Waldeck, Pyrmont, on August 11, 1827. He came of a good family and could trace his ancestors back for several hundred years. His sister accompanied the Princess of Waldeck to Holland as lady-in-waiting when the Princess married a King of Holland. He used to speak of dining at the table of the Prince of Waldeck as a young man.

He took his degree of M.D. in 1851 at the University of Göttingen. As a student he engaged in the customary duels and he carried sword scars, one especially where his cheek had been laid bare. He served his time in the army, taking part in the Schleswig-Holstein war against the Danes. Shortly after his graduation he came to South Australia as ship's doctor in charge of emigrants. He arrived here on October 9, 1852, and decided to stay. He settled in Lobethal for a short period before going to Woodside, where he remained for the rest of his life.

An entry in the Medical Register shows that on July 5, 1853, at the Adelaide Hospital a meeting of the Medical Board was held. Present were the president and secretary. Testimonials, declarations and fees were presented by Hermann Carl Fred. Esau, M.D., Göttingen, August 11, 1851. The registration was signed by Wm. Wyatt, secretary, J. G. Nash, president. The entry is number 88 in the Register.

On September 29, 1854, Esau married a daughter of Mr. John Clezy, of Nairne. In due course they were to have a family of ten.

Shortly after his arrival in the State he became a naturalized British subject, and a very loyal one, with a great admiration for Queen Victoria. Thus was set the stage for nearly fifty years of intense professional activity coupled with a service to the community in numerous other capacities. I hope to be able to convey to you some indication of the way in which this versatile man served his adopted country.

His house at Woodside, which many of you know and in which one or two of you have lived, was built in 1856. It was two-storied, with a large central staircase; the doors were of massive cedar. He interviewed his patients who called there in the large dining room. At the back there still stand the large stables, a most important part of practice in those times.

His practice was entirely a visiting one. The sick were treated in their homes. There was no local hospital. A team of horses was kept, at times to be driven; but more often than not he would ride, as roads and bridges were few in number. Some indication of his stamina may be gleaned from the following incident. He was very musical and it happened that an Italian opera company visited Adelaide. He rode to the city and back three times in one week to hear the company. He would leave home at Woodside in time to stable his horse in the city, hear the performance, retire to an oyster supper, and then saddle his horse and ride home. On top of a day's work this was no mean feat. Probably on his return a patient would be waiting for him and he would be faced with another ride at night.

Those were the days of large families, and Dr. Esau's services were much in request for confinements. His practice extended to Harrogate and the Bremar Ranges on one side and to Forest Range and beyond the Tiers on the other, as well as to Mount Torrens and beyond and to Grunthal.

Trained nurses were unknown and he was lucky if he could get a competent midwife to assist him. The houses were primitive and washing facilities were conspicuous by their absence. On one occasion he looked under the bed to find the usual domestic article, only to see several pans full of milk. It was explained that such treatment caused the cream to rise in better fashion. I have spoken to an old woman, now aged eighty-two years, who was attended in confinement by Dr. Esau. She describes him as being a very good doctor, in whom the people had complete faith.

Details of his medical work are not easy to find, but I have come across small extracts in the Mount Barker *Courier* which in the way of country newspapers gave some prominence to medical happenings. In the issue of October 8, 1880, the Mount Torrens correspondent writes: "Mr. E.J.S. of this township met with a painful accident, dislocating the knee. Drs. Esau and Deane were soon in attendance and succeeded in replacing the joints [*sic*]."

In the earlier days of his practice anæsthesia was not in use. As well as being a kindly man he was a masterful one, a useful trait, for patients submitting to minor surgery had to grin and bear it. The advent of cocaine was an advantage to both patient and doctor.

There was no dentist in the district and tooth extractions were carried out by Esau. His son has told me that he used to assist his father by holding the victim's head.

He did all his own dispensing, and at the end of a heavy day's work would make up the medicines to be dispatched by coach on the following morning. When Sir John Downer (then Mr. Downer) was hunting kangaroos on Terlinga, a sheep station near Tungkillo, he crashed into the limb of a tree and lay unconscious in a shepherd's hut for days. Dr. Esau rode down every day to visit him, with happy results, and the foundation of a lifelong friendship was laid.

His son has told me that excepting the last year or two of his life it was a rarity for Dr. Esau to spend a whole night in his bed. When one thinks of the winter nights in that district one can picture the hardship of medical practice carried out on horseback. He was very good to poor people, to whom his services were available free of charge. He was never known to sue for payment; unfortunately, human nature being what it is, advantage was at times taken of his charitable outlook. For a confinement his fee was £2 2s., with an extra charge for long distances. For a tooth extraction he received five shillings. Reference to his fees was made in verse at a complimentary banquet in his honour held by the Lodge of Oddfellows in 1901. I quote two of the stanzas which give insight to his character:

> Like Jehu, to the sick one's home,
> You furious drove by night or day,
> Nor flooded stream, nor rocky gorge,
> Nor trackless bush could block your way.
>
> And when physicians slight their care,
> Or fees for skill unduly raise,
> Old dames will say—"It was not so
> In Doctor Esau's better days!"

His name appears amongst the list of members of the South Australian Branch of the British Medical Association for 1881. This Branch was founded in July, 1880, so he was one of the first members.

I now turn to a short account of his activities, other than medical, in the community. Much of this I have gleaned from a search of the files of the Mount Barker *Courier*, but as this paper did not start until 1880 I can provide you with few details of his younger days.

His disposition was extremely genial and he had hosts of friends. His presence was welcomed with pleasure in every town for miles around Woodside.

He was a great churchman and attended divine service whenever his professional duties permitted. He would drive Bishop Kenyon when he visited the district for confirmation services. His assistance was available to other denominations. In the *Courier* of October 14, 1881, there is a reference to anniversary services in connexion with the Woodside Wesleyan Church followed by a tea meeting at the Institute Hall. At the latter function Dr. Esau is named as one of those contributing to the music and singing. In the issue of January 6, 1882, we read that on the evening of Commemoration Day, following an excellent tea, the hall was crowded for a concert. Applause was frequent and hearty. Dr. Esau, Miss Nellie Esau, Miss B. Lorimer and Mr. Kauffmann furnished the instrumental part of the entertainment. A few days later the festivities were brought to an agreeable conclusion by a picnic in the doctor's paddock followed by dancing till past midnight in the institute.

He took a special interest in children, and as health inspector he was particular in seeing that the school buildings were kept in good sanitary condition.

He held many offices. He was returning officer for the district of Onkaparinga, registrar of births, marriages and deaths, a commissioner for taking affidavits, a justice of the peace, chairman of the board of advice and president of the Woodside Institute, medical officer to the destitute poor of the district and to the local board of health, and treasurer of the Loyal Onkaparinga Oddfellows' Lodge, a position which he held for over forty years. He was a Freemason.

As a man with a love for horses it was fitting that he should be connected with the Onkaparinga Racing Club. He was president of this club from its inception until his death and he filled the position of judge in the early days. In the committee room beneath the members' stand there hangs on the wall an excellent photograph of him with the caption: H. Esau, M.D., President O.R.C., 1875-1901. An extract from the *Courier* dated March 30, 1883, in giving an account of the annual race meeting is headed:

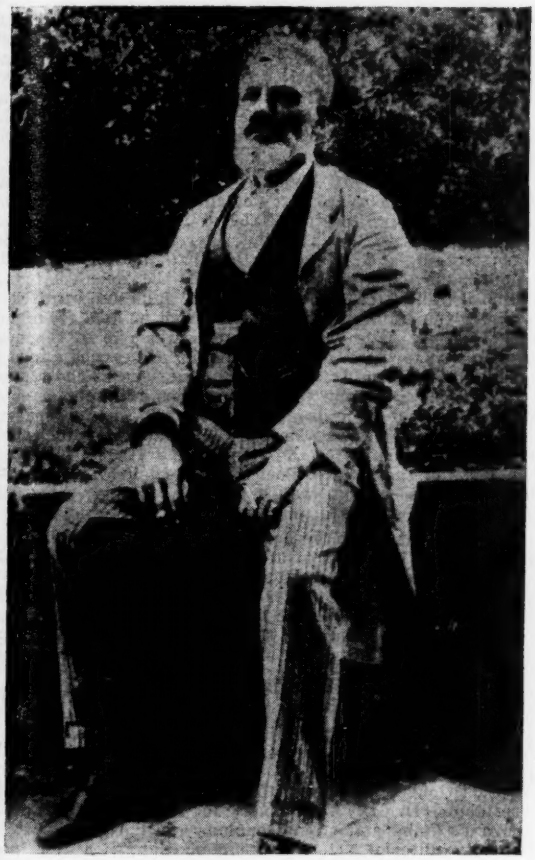
Onkaparinga Racing Club.

Stewards: Mr. J. L. Stirling, M.P., Archibald Hay, J.P., E. M. Bagot, S. R. Wilson, A. R. Malcolm, Thos. Walker, F. T. Cornelius, and Dr. Esau.

Judge: Dr. Esau.

Secretary: Mr. A. von Doussa.

At this stage it is perhaps fitting to relate a story indicative of his complete lack of self-consciousness. He had trouble with his teeth and after losing many of them found it necessary to visit Adelaide, where a dentist was consulted and arrangements made for the fitting and supply of a denture. The latter on delivery was considered by him to be not up to standard. However, the annual race meeting was shortly to be held, and on the Easter Monday he duly went wearing the ill-fitting plate. During the afternoon, to his great satisfaction he saw the offending dentist amongst the crowd in front of the stand. He made straight for him and with much expostulation waved the teeth before the astonished dentist's eyes. The amusement provided for the assembled crowd can readily be imagined.



Hermann Charles Frederick Esau.

There are good descriptions of the Onkaparinga races in the *Courier*. As judge, Dr. Esau seems to have given satisfaction to that most critical of crowds, the racing public. In 1884 he relinquished the position of judge, the duties being taken by Mr. H. Hughes. Many interesting matters other than those related with Dr. Esau are noted in this search of the files. For instance, a reference to the convalescence of Mr. W. E. Gladstone from an illness is noted in April, 1884. In the issue of November 14, 1884, a paragraph states that Dr. E. H. Rennie, of Sydney, has been appointed professor of chemistry in the University of Adelaide.

I also came across a reference to Mr. Simpson Newland, but there was no mention of Master Henry, who had yet to make his mark in the world.

As a young man in his native Germany Dr. Esau had attended a riding school. His knowledge of the handling of horses was to stand him in good stead subsequently. He never had a coachman. The gardener looked after the horses, but Esau always drove himself, and for night calls would never disturb the gardener.

On one Easter Monday he was detained by a midwifery case in Woodside, but finished in time to see something of the races. Before he had time to harness up, another case was waiting for him at Mount Torrens. He jumped up in the cart beside the messenger and told him to drive like fury to Oakbank, for he intended to see the steeple on his way. His knowledge of duelling was also made use of. At a ball at Woodside in his young days a hot-headed Irishman resented his attentions to a particular lady and sought to arrange a duel with pistols. Dr. Esau, on being thus challenged, accepted and declared for swords. The offended one wisely declined. In due course his reputation as an obstetrician spread to Adelaide. A professor at the University took a house at Woodside so that his wife might be attended at her confinement by Dr. Esau.

He was a great classical scholar. He could quote from Shakespeare readily. He was well versed in mythology.

He was an expert billiards player and enjoyed many games with his friend Mr. James Johnston, of the Oakbank Brewery, who had a table. He was a keen whist player.

He always kept a couple of greyhounds, being fond of a hare hunt. These dogs and a faithful brown retriever followed him on his rounds. He was connected with the old volunteer club at Woodside and on one occasion he won a silver watch in a shooting contest. He allowed himself few holidays, but is said to have visited Melbourne twice, the last time being in 1888 for the Exhibition. He was an inveterate cigar smoker and he returned from the Exhibition proudly showing a cigar a foot long, wrapped in silver paper.

He was a good swimmer. In the summer all the male inmates of his household were packed off with himself at break of day for a swim in the Onkaparinga. On these occasions a jar was always taken to hold the leeches caught, the yellow-striped ones being retained for use in the practice. He appreciated and understood good food. Three butchers called at the house and vied with each other in presenting the choicest cuts. Open house was kept, and the family was seldom without visitors.

This fine figure of a man in his later years developed diabetes and his eyesight was affected thereby. The years of hard work had left their mark.

His end was dramatic and completely fitting. Great preparations were made by Dr. Esau's numerous friends for his jubilee, the account of which I have obtained from the *Courier* of August 16, 1901.

On Saturday evening, August 10, the people of Woodside and adjacent townships gathered together to do honour to Dr. H. C. F. Esau, the occasion being the fiftieth anniversary of his professional career, also his birthday, and the anniversary of the date of his arrival in the province. Shortly after seven o'clock a monster torchlight procession was formed at the institute and was headed by the Lobethal brass band. The procession passed through the main street and thence to the residence of the doctor, where about 500 people had assembled.

The combined Lobethal and Hahndorf Liedertafels sang a serenade, during which the doctor and his family appeared on the balcony. A phaeton was in readiness and in this the doctor was drawn to the institute, many willing pullers taking the place of horses.

At the institute, which was packed to the doors, choruses were rendered at intervals by the Liedertafel and selections by the band, these being interspersed with short speeches. Among the speakers were Mr. D. J. Byard and Mr. Alfred von Doussa. Mr. Caldwell, the local M.P., returned thanks on behalf of Dr. Esau, who appeared quite overcome with the proceedings.

Refreshments and music filled in the rest of the evening, Dr. Esau in the meantime having been conveyed to his

residence in a manner similar to that by which he was brought to the institute.

He was found dead in his bed the next morning. The funeral took place on August 13, 1901. The procession was one of the largest seen in the district. Following the hearse was the doctor's old horse Jack, performing the last service for the master he had served for a quarter of a century, drawing the floral tributes which the hearse could not accommodate.

It is noted that amongst those present at the graveside were Dr. Blaxland, Dr. Corbin, Dr. Henderson, Dr. Barratt Hine, and Dr. Proctor, a tribute from his professional neighbours. He was buried in the little cemetery at Woodside on a hill overlooking the township which he served so faithfully for so long.

A touching tribute to his life and work was written by Mr. R. Caldwell, M.P., and this appeared in the *Courier*. This, in verse, has some considerable merit, but it is too lengthy to quote in full on this occasion.

Acknowledgements.

It is a pleasure to acknowledge the help I have received in compiling this address from Dr. Clifford Jungfer, of Lobethal, and from Dr. Esau's one surviving son, Mr. Ernest Esau, and the latter's daughter, Miss Esau.

I have also appreciated the gracious courtesy of the staff at the Adelaide Public Library, who have been put to some trouble in assisting me. Mr. Tom Young has helped in his capacity as Secretary to the Medical Board by allowing me to view old records.

A REVIEW OF VICTORIA'S EARLY MEDICAL JOURNALS.

By BRYAN GANDEVIA,
Melbourne.

> The Moving Finger writes: and having writ
> Moves on: nor all your Piety nor Wit
> Shall lure it back to cancel half a line,
> Nor all your Tears wash out a Word of it.

OMAR'S words epitomize the historian's faith, but deep in the shadows of time the script is often difficult to read and the pages of history are apt to become shuffled in our all too careless hands. Much tedious research will be necessary to reconstruct the fascinating story of early Australian medicine, and the observations which follow are set down in the hope that, apart from any intrinsic interest, they will assist in the interpretation of the frequently conflicting statements to be found in available Victorian sources.

In the nineteenth century medicine was practised in a most spirited fashion, and medical journalism followed suit—personalities coloured many editorials and bias affected many editorial pens. Before the value of its comments on any topic can be accurately assessed, each publication must be placed in proper relation to its environment, its source examined and its policy defined. This will be attempted in a review of the six Victorian journals published between 1850 and 1877.[1]

The Australian Medical Journal.

> . . . my fellow-ministers
> Are like invulnerable.
> —*The Tempest*, Act III, Scene 3.

The first issue of *The Australian Medical Journal* appeared in January, 1856, edited "under superintendence of the Medical Society of Victoria" by a committee of management consisting of six members of the Society. Its stated aims were to foster unity in the profession, facilitate interchange of medical views concerning diseases in Australia, and advance the cause of medical reform, particularly in regard to the suppression of quackery. It was considered to be all the more necessary as a result of the population increase after the gold rush, because "the medical profession alone seems to have been left destitute of an accredited organ to maintain and fortify its proper position in the social fabric of which it constitutes an important support". It only remained for members "to act in harmonious concert for the attaining of a common objective, stimulated by no motives of personal distinction".

It was initially published quarterly, but after 1864 issues appeared monthly. The annual subscription was one pound.

The first editors were Dr. Maund, physician to the Lying-In Hospital and the originator of the project, and Mr. Black, M.R.C.S. The other members of the committee were Dr. Tracey, M.D., Mr. Alexander Fisher, M.R.C.S. (friend and supporter of James Beaney), Dr. Motherwell and Mr. Barker (respectively senior physician and surgeon at the Melbourne Hospital). In 1858 the editor was freed of all direct responsibility to the Medical Society in an effort to indicate the journal's independence of thought, but at the same time eight members of the Society were also appointed to take charge of specific sections.

William Thomson, M.R.C.S., an early and vigorous advocate of the contagionist doctrine and the germ theory of disease, was editor from 1859 to 1861. On his resignation the necessity for avoiding references to personalities was stressed, and it was stated that thenceforward the whole policy of the Journal would be decided by an editorial committee. At this stage Dr. James Edward Neild, assumed the editorship, a position which he held for almost two decades. This remarkable man was one of the most prominent figures in colonial medicine. He earned a modest income by performing autopsy examinations at the request of his friend Dr. Youl, the city coroner, and supplemented this by acting as a dramatic critic for the newspapers. Among his friends were Marcus Clarke and Henry Kendall. His opinions dominated the Journal and greatly influenced the views of the Medical Society as a whole. The editorial tone of this period was frequently bitter, sometimes personal and usually dogmatic.

The criticism that the Journal was the organ of a relatively small but influential clique was made repeatedly, although on several occasions it made an effort to demonstrate its impartiality. After one year the original editorial committee resigned because of this charge. Presumably in reply to adverse comment, the preface to the 1857 volume stated: "It cannot be too often or too loudly proclaimed that this Journal has not been called into existence to further the interests . . . or puff into notoriety the pretensions of a clique or any small section of the Medical Profession." The Society itself was aware that neither it nor its Journal could be considered representative of the profession while only a "comparatively small minority" of practitioners joined, for this fact was deprecated by the President (Dr. D. J. Thomas) in 1864. Reviewing the Journal's "long and often troublous and chequered career" the last editorial prior to amalgamation with the *Intercolonial Quarterly Journal* (to form the *Intercolonial Medical Journal of Australasia*) in 1895 noted that its association with the Medical Society "had given occasion for the insinuation that the Journal was the organ of a clique . . . retarding its success in other colonies". However, it was concluded that the Journal had "fairly faithfully reflected the medical work of Victoria at all events".

Its attitude to major events of the day was inevitably that of the Medical Society. It supported Professor Halford, particularly in his campaign for the world-wide adoption of his famous snakebite cure—the intravenous injection of ammonia. In 1857 it advocated the establishment of a medical school at the university, and subsequently supported the university authorities in most of the controversies in which the latter were engaged from time to time. Following a violent disagreement with the Medical Society, William Thomson found his views on the ætiology and epidemiology of typhoid fever and phthisis opposed by the Journal and the Society. James G. Beaney was a member

[1] Additions to library files permit extension and minor modification of the intentionally limited review by J. H. L. Cumpston (1939). Some consideration has been given New South Wales journals by A. M. McIntosh (1951).

of the Society and a contributor to the Journal in the first few years, but for most of his career he and his activities were viewed with disfavour.

Among the earliest examples of Victorian coloured illustrations are several diagrams of metatarsals and metacarpals published in July, 1863, in conjunction with a paper by Professor Halford. Illustrations of any description were uncommon, but a drawing of the abnormal venous circulation in a case of cirrhosis of the liver was printed in the first volume. Two woodcuts of the "before and after" variety published in 1857 are reproduced because of their historical and surgical interest (Figure I).

he was an interesting personality, little is known of his life. Among his activities was the preparation of gentlemen for various medical examinations personally and by correspondence. He wrote voluminously on diseases of the stomach and duodenum, paralysis from diseases of the spinal cord and membranes, hydrocephalus, and aneurysm. *The Medical Record of Australia* contained a series of his articles on "Diseases of Australia". This extensive experience in authorship enabled him to offer intending contributors an outline of the correct method of reporting cases and recording autopsy findings, which he published in the "Notices to Correspondents" column.

FIGURE I.

A tumour of the maxilla successfully removed by Mr. Edward Barker, with preservation of the sight in the right eye, the left having been damaged many years previously. A special plate to replace the hard palate was designed by Mr. Pardoe, a leading dentist. (From *The Australian Medical Journal*, 1857.)

In general, *The Australian Medical Journal* reflected the views of a Medical Society led by the more influential and successful practitioners of Collins Street, the university and the Melbourne Hospital. That these views were not always in accord with those of other sections of the profession is clear from the appearance of several journals frankly opposed to the Society's policy. At the same time, the presidential statement in 1859 that it was "exceedingly rare to hear of any personal animosities or any personal jealousies amongst us" became sadly inapplicable to current professional affairs.

The Medical Record of Australia.

. . . I stood i' the level
Of a full-charg'd confederacy, . . .

—*King Henry VIII*, Act I, Scene 2.

The Medical Record of Australia laid modest claim to be "A Journal of Australian, European and American Medicine, Surgery, Midwifery, Physiology, Medical Jurisprudence, Chemistry, Materia Medica and Pharmacy". It was first published in May, 1861, appearing fortnightly until September and then monthly. Publication ceased in December, 1863, owing to the ill health of the editor. The annual subscription was one pound six shillings.

An editorial statement that "*on no account* shall the Journal be used for either personal or party attacks" was inspired by the receipt of two communications of that nature prior to the issue of the first number.

The editor and proprietor was Dr. C. E. Reeves, friend and supporter of James Beaney, and the author of "The Queen *v.* Beaney", a sympathetic account of Beaney's trial following the death of Mary Lewis (Craig, 1950). Although Reeves and Beaney virtually wrote the whole of *The Medical Record of Australia*, Reeves himself admitting that the journal received few contributions from other members of the profession. Beaney wrote the first case report in characteristic fashion. A dislocation of the elbow had been treated on the "diggings" as a fracture, although "we cannot seriously conceive how any man possessed of the slightest amount of surgical and anatomical knowledge" could have made such a mistake. Under Mr. Beaney's supervision, extension with pulleys during chloroform anæsthesia produced an excellent result. Perhaps the most interesting of Reeves's contributions was a note on several cases of sudden death "from the formation of fibrinous clots in the pulmonary arteries".

The editorial policy in regard to current affairs was almost invariably directly opposed to that of *The Australian Medical Journal*. Reeves disapproved of the appointment of an overseas professor of anatomy, regarding it as an affront to the profession in Melbourne. He claimed that the lecturers, most of whom were members of the Medical Society, were not the best available in the colony, and it is likely that he considered Mr. Beaney and Dr. Reeves better qualified for these positions. In 1863 he announced his intention of giving a free course of evening lectures on *materia medica* and chemistry, to be followed by others on medicine, surgery, midwifery, anatomy and physiology—apparently a direct challenge to the new medical school.

Reeves supported the club system, whereby doctors tendered for positions as medical officers to what were virtually friendly societies. This subject had been bitterly debated by the Medical Society, where there was a slender majority in its favour. Reeves remarked that "the sym-

pathy of the members of the Medical Society for the suffering public" was "as genuine as that which crows would express were they able to speak for sick lambs". He felt that the Society's attitude was influenced by the wealth of its members.

One of Reeves's editorial statements is pertinent to the theme of the present review. He remarked: "The position held in a provincial town—for Melbourne cannot be considered other than such—by the editor of a medical journal is an extremely delicate one, and it becomes still more so when he is a medical practitioner striving to earn enough to buy tea and damper to keep the editorial soul and body from bidding goodbye to each other."

In view of Beaney's known propensity for self-advertisement, his friendship with Reeves, and his numerous contributions to this journal, it is possible that he shared with the editor some of the financial responsibility for this publication.

The Melbourne Medical Record.

This inundation of mistemper'd humour
Rests by you only to be qualified.
—*King John*, Act V, Scene 1.

The *Melbourne Medical Record* appeared weekly from February, 1875, a year's subscription being thirteen shillings. Although prominence was given to advertisements of Dr. Reeves's works, which we note include *The Medical Record of Australia*, Volumes I, II and III, and of his stricture dilator and womb supporter (Figure II), there is no doubt that Reeves was not the editor. Both the style and the policy were completely different from those of the preceding journal.

The following remarkable aim is stated in the prospectus: "To support the dignity and interest of the profession against those members of it whose efforts for years have been to sink it." In the first genial issue there were attacks upon "club doctors", a reference to Collins Street as Jalap Street, and caustic comments on the strange frequency with which the professional deeds of certain successful surgeons were reported in the daily Press. Undeterred by a mild rebuke from *The Herald*, the second issue ("State of the Profession in Victoria, No. 2") resurrected two unsavoury coroner's cases and rendered the Vice-Chancellor of the University of Melbourne the butt of uncomplimentary jest. The committee of the Lying-In Hospital was advised to change the name to "'The Hospital for Cultivating Burials" and to put over its door in letters made with the skulls and long bones of its victims 'Ye who enter here leave hope behind'".

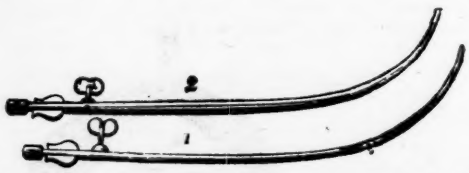
Subsequent issues were largely devoted to a scathing indictment of Mr. Beaney and his works, notable chiefly for revealing beyond any reasonable doubt that some of Beaney's works were written by a certain Dr. Hickson (Gandevia, 1952). The Medical Society was referred to on one occasion as "the Society for cultivating Medical Piddling", so that it is unlikely that the editor, concerning whom we have no information, was a member.

A column headed "Gossip" was contributed regularly in the form of a letter and signed "Pill Box". It is doubtful whether a more scandalous column has ever been published in any journal, but, although the truth suffered some exaggeration and perhaps perversion, it is extremely valuable for the side-lights it offers on prominent medical personalities: For example, the writer of the column considered that "the only occasion upon which I ever knew Thomson of South Yarra to be in the right is in the case of the Fawkner Park stink . . . . I most devoutly pray that he and the Rev. Guinness may succeed in putting the corporate nose of the City Council in the six inch trenches which that august body will not have properly covered in". At that time Melbourne's nightsoil was ploughed into Fawkner Park, which was opposite Dr. Thomson's residence.

The *Melbourne Medical Record* published several excellent but unsigned cartoons, including three of Beaney (Figure III), while "Pill Box" supplied some hundreds of lines of quite well-written and amusing doggerel, chiefly dealing with "Champagne Jimmy" (Beaney) and his deeds in peace and war.

Its attitude to most important events was almost invariably one of hostile opposition. Although it attacked the author on other occasions, it did give a favourable review of Thomson's book "On Typhoid Fever", containing the results of an investigation into the prevalence of that disease in Melbourne and advancing the contagionist viewpoint.

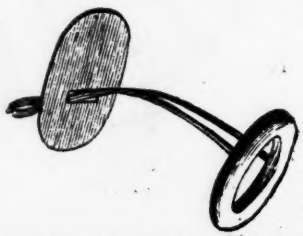
STRICTURE DILATOR. DR. REEVES' (Registered).



This Instrument for dilating Stricture by pressure instead of cutting or splitting, is made in two sizes, No. 3 dilating to No. 8, and No. 5 dilating to the size of a No. 10 Bougie. Figure 1 shows the instrument closed; Figure 2 dilated.

Price 30s. in Silver, and 25s. in German Silver each.—Sold by J. Brooks.

WOMB SUPPORTER. DR. REEVES' (Registered).



This Instrument has been used in more than two hundred cases of falling and displacement of the womb. It can be worn without pain and is easily taken out and replaced, price from 15s. to £2 2s. to be obtained of the Matron of the Hospital Stephen Street, and of Dr. Reeves.

FIGURE II.
An advertisement to be found in many issues of the *Melbourne Medical Record*.

On October 1, 1875, the proprietor stated that he was compelled to part with his interest in the journal owing to ill health, and that thenceforward issues were to be fortnightly. This notice was still appearing in February, 1876, with no apparent change in editorial policy. However, in March the printer was changed, and four months later the aim previously quoted was amended by deletion of the last fourteen words. It is notable that a more conciliatory tone was adopted in regard to Mr. Beaney, and that more articles by Dr. Reeves were published. It is conceivable, therefore, that Reeves took control of the journal at this juncture. Otherwise, with the exception of the direct continuity in the numbering of the volumes, there is little to indicate any connexion between the *Melbourne Medical Record* and the previous journal of similar name.

The *Melbourne Medical Record* maintained its antipathy for the Medical Society and *The Australian Medical Journal*. Thus, in March, 1877—the year of its demise—it was observed that the November, 1876, number of the Journal had just appeared. "The articles are full of interest and well worth reading by those anxious to know what the Melbourne medical world was doing in the early months of last year."

Who was the first editor? We can only guess that he was probably a close associate of the late Dr. Hickson, since he appeared to possess a remarkably intimate knowledge of the relationship existing betwen that homœopathic physician and James George Beaney.

The Medical and Surgical Review (Australasian).

Vexed I am
Of late with passions of some difference, . . .
Which gives some soil, perhaps, to my behaviours.
—*Julius Caesar*, Act I, Scene 2.

In February, 1863, less than two years after he had commenced business in Melbourne, F. F. Baillière, who will be remembered as Beaney's "advertising manager" and publisher (Craig, 1950), commenced publication of

FIGURE III.
A caricature of James George Beaney. (From the *Melbourne Medical Record*, 1875.)

The Medical and Surgical Review, "a bimonthly Journal of Medical News, Literature and Criticism". The first editor was James Keene, late surgeon to the West London Hospital. After April, 1864, his name did not appear on the title-page, although several signed contributions of his were published subsequently. Close examination at this stage reveals no change in format or editorial policy, but henceforth all communications were to be addressed directly to the publisher.

Keene was not afraid to risk jeopardizing his position with Baillière by criticism of Beaney. In his own words: "We fearlessly exposed the charlatanism[1] of Mr. Beaney, though that A1 medical celebrity had, not many weeks previously, been advertised as the purchaser of a medical work for which he handed our publisher the large sum of £100." Beaney, incidentally, contributed several articles to *The Medical and Surgical Review*. The editor was an enthusiastic supporter of William Thomson and the contagionist doctrine, and it appears that Thomson contributed an extremely critical review of S. D. Bird's work on phthisis. Thomson never denied the accusation that he was the author of a leading article which vividly and critically described a meeting of the Medical Society at which several controversial matters were debated in spirited and often heated fashion. The meeting actually marked the beginning of the end of Thomson's association with the Society, from which he was eventually expelled. The details of this argument are beyond our present scope, but it is worth observing that this or a very similar meeting was the one referred to in a later issue of *The Medical and Surgical Review*: "Hitherto the Medical Society has been the chief arena for the interchange of medical amenities but its glory has departed. Such soft words as liar . . . are now but seldom heard there; for months such a thing as the president knocking down the treasurer or vice versa has not been seen." Keene was also an opponent of the club system of medical practice.

Publication ceased dramatically after November 1, 1856. In that issue a notice was pasted over the top of the usual "Notice to Correspondents". It was headed "Notice to Subscribers" and stated that "in consequence of the impossibility of obtaining an editor capable and willing to conduct The Medical and Surgical Review as an *Impartial Scientific Journal*, the publisher begs to announce his intention to discontinue the publication of the same at the end of the current year". No further issues are in the library of the British Medical Association. The only clearly controversial topic immediately preceding this announcement was an attack on the methods used by certain physicians and surgeons to advance their prospects at the recent Melbourne Hospital election—at which, incidentally, Beaney was deposed. Perhaps Baillière felt that such attacks on leading practitioners might adversely affect his business. Nevertheless, the journal appears to be a reliable and valuable source of information.

The Medical and Surgical Review: New Series.

. . . do not stain
The even virtue of our enterprise.
—*Julius Caesar*, Act II, Scene 1.

A new series of *The Medical and Surgical Review* was commenced in October, 1873, issues appearing monthly. However, leading articles were excluded because they were "often mere arenas for the display of professional jealousy". Its primary object was the abstraction and review of overseas papers, and the publication of local contributions was a secondary consideration. By virtue of this change in policy the journal loses much of its interest to the historian, despite the fact that letters to the editor were invited. A mild opinion on local topics was ventured only on rare occasions.

The last issue available is that for October 1, 1874, although it appears to have persisted at least into 1875. Both series in the library of the Victorian Branch of the British Medical Association are incomplete.

Melbourne practitioners contributed freely to both series, and among them were J. G. Beaney, W. McCrae (Chief Medical Officer for the Colony), W. M. Turnbull (later a leading obstetrician), James Rudall (sometime pathologist and surgeon to the Melbourne Hospital), and John Wilkins.

The Australian Medical Gazette.

No levell'd malice
Infects one comma in the course I hold.
—*Timon of Athens*, Act I, Scene 1.

The first issue of *The Australian Medical Gazette*, the official organ of the newly formed Medical Association of Victoria, appeared on January 30, 1869. In the prospectus it was stated that *The Australian Medical Gazette* would be "free from all party feeling and jealousy", its chief objectives being the cultivation of medical science, the protection of the interests of the profession and the promotion of unity among medical men. This last aim was constantly reiterated and appears to have been honestly attempted.

[1] In regard to a particular case.

The Association itself was formed because of the need for "an organisation worthy of and enjoying the confidence of the majority of the profession", a statement which implied lack of faith in the Medical Society. Thus, a year later, the editor (Dr. Lloyd) remarked: "Had the Australian Medical Journal and the Society sought the welfare of the many instead of the few, in all probability neither this Journal nor the Medical Association would at the present time have been in existence." It is also significant that *The Australian Medical Gazette* claimed to represent only general practitioners. The precipitating factor in the Association's formation was the decision of the Medical Society to support Dr. Youl, the city coroner, in his efforts to establish the post of government pathologist, and to instal his protégé Dr. Neild in the position.

In spite of its professed aims, *The Australian Medical Gazette* soon found itself opposed to the views of the chief medical officer, the Central Board of Health and the city coroner. It also considered that Professor Halford's snakebite cure was of no value. In regard to the club system, it attacked the project to found a scholarship at the university in honour of Dr. Graves, one of Victoria's earliest medical officers, who had "the questionable distinction of having first introduced into Victoria the unprofessional and degrading practice of tendering for medical service to benefit Clubs". Dr. Reeves, who was a member of the Association, presumably dissented.

The *Australian Medical Journal* referred to *The Australian Medical Gazette* in an article headed "The Antagonism of Ignorance" as "a periodical ostensibly representing the profession, but in reality devoted to the gratification of personal hostility, which, but for this gutter of literary muddiness, would not readily find an opportunity of sending its paltry stream of abuse into the world". Those responsible for "this disreputable publication" struggled desperately "to escape the nothingness which, however, is their ultimate and inevitable destiny". This appeared during Dr. Neild's editorship of the *Australian Medical Journal*. Nevertheless *The Australian Medical Gazette* appears a relatively sober journal.

It is worth recording that at one Association meeting Dr. Figg referred to his successful treatment of several cases of bronchocele by thyroidectomy. Dr. Reeves commented on the risk of hæmorrhage in this operation.

In 1870 the size of the journal was increased and it was issued monthly instead of twice monthly. No hint of impending cessation of publication is to be found in the last available number (December, 1871). There is no apparent relationship between *The Australian Medical Gazette* and *The Australasian Medical Gazette*. The latter was first published in Sydney in 1881 as the organ of the combined Branches of the British Medical Association, and, incidentally, the chief Victorian correspondent was Dr. Neild.

Conclusion.

As the organs of their respective organizations, *The Australian Medical Journal* and *The Australian Medical Gazette* represented two influential sections of the profession whose interests and opinions were frequently at variance. As such their position is clearly defined.

The close association of Reeves and Beaney which is apparent in *The Medical Record of Australia* indicates the lines along which interpretation of its views should proceed. It is singularly unfortunate that neither internal nor external evidence provides a positive clue as to the originator of the *Melbourne Medical Record*. While it is likely that strict accuracy was occasionally sacrificed for the sake of virulence, it remains valuable for its caustic comment on current medial affairs. Despite some inevitable partisanship, *The Medical and Surgical Review* appears relatively sound, and Baillière's reason for discontinuing the first series is not obvious today.

This review of the major characteristics of the six Victorian medical journals is by no means exhaustive, but it is sufficient to indicate that no single contemporary source will serve as an adequate basis for the investigation of any aspect of Victorian medical history. Whoever would interpret what the "Moving Finger" has written of this period must seek out all the scattered pages and search them carefully for the truth.

Acknowledgements.

I am indebted to many senior colleagues who have encouraged and assisted my investigations into the past. My thanks are due to Dr. W. W. S. Johnston, who read the typescript, and Mr. R. Inglis, of the Royal Melbourne Hospital, who prepared the illustrations.

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A SIMPLIFIED TABLE OF FOOD COMPOSITION FOR USE IN THE EVALUATION OF AUSTRALIAN DIETS.[1,2]

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THE qualitative rating of a diet can be made by simple inspection; the complete menu for a day or a week, as the case may be, can be studied to ascertain whether the "protective" foods are included in adequate amounts. There are times when a quantitative evaluation is required, for example, in nutrition research studies, and when a physician prescribes a special diet, particularly if the diet is to be followed for a long period of time or if it is prescribed for children or for pregnant or lactating women. In a quantitative evalution the foods on the diet have to be converted into nutrients for comparison with a recommended daily allowance.

A table showing the composition of foods is required when diets need to be evaluated, and all such food value tables must be used with discretion; care should be taken not to try to make a set of tables produce a result the exactness of which is out of proportion to the limited accuracy of the figures in the tables. A knowledge of the limitations of food value tables will beget the discretion which must be exercised if the tables are to be used wisely. Foodstuffs have inherent biological variation due to differing genetic capabilities of the plant or animal source, climatic environment, soils and maturity. The bigger the geographic area from which the food values have to be averaged, the greater will be the range of food composition figures. The Australian continent thus presents a problem in assessing suitable values for Australian foods. In addition to this natural variation, the accuracy of food value tables will be affected by factors associated with the distribution of food; in the modern world food is subjected to procedures of harvesting, storage, processing and preservation which may affect the nutritive quality.

Three authoritative sets of food composition tables have been published in Australia. Bourne (1938) reported a group of original analyses of the foods that were found in

[1] This paper is abstracted from the thesis leading to the degree of doctor of science granted in 1951 from the School of Public Health, Harvard University, Boston, Massachusetts, United States of America. The research was made possible by grants from the King George V and Queen Mary Maternal and Infant Welfare Foundation, Sydney, Australia, and from the James Foundation through the Department of Maternal and Child Health, Harvard School of Public Health, Boston, Massachusetts.

[2] The figures appearing in the simplified table were accepted by the New South Wales Dietetic Association in 1949.

a food consumption survey undertaken by the Commonwealth of Australia. To meet the requirements of the army, a table of food composition was published by Marston and Dawbarn in 1941, which was later revised (1944). This included ranges of values for nutrients, particularly vitamins, and consequently uniformity was not encouraged, because when diets were computed those doing the calculations were apt to choose different values. In order to set out a table of preferred figures Osmond compiled tables with a revision in 1948, and it is this document which forms the basis of the following simplified table of food values.

Because of the low degree of accuracy which at best can be derived from a set of food value tables, it is possible to simplify the Osmond tables by grouping foods which have similar composition. As in all grouping, some information is lost, but a knowledge of the Australian food pattern makes it possible to group with discretion. For instance, the nutritive value of apples and pears is so similar to that of other summer fruit that it is a permissible simplification to group them; on the other hand, peas and beans form an important part of the Australian diet, so that information would be lost if they were averaged with marrow and onions, which have a much lower nutritive content and are not eaten as regularly as peas and beans.

The American workers Donalson and Leichsenring (1945) studied the difference between computing diets by calculating each food item separately and by the shortened method of using a table in which foods of similar composition were grouped. The comparison of the results secured by the two methods showed a high degree of accuracy for the values in the simplified table when compared with the longer method of computing each food separately. When tested statistically, the observed differences were shown to be due to errors in random sampling and not to real differences between the two methods.

It is hoped that Table I will serve to initiate a uniformity in dietary calculations and to simplify computational procedures for workers who are not familiar with the use of the more detailed tables.

Description of Table I.

In the following paragraphs the explanatory footnotes to the items in Table I with the superior letters [a] to [f] are discussed *seriatim*.

Reference.[a] Unless otherwise stated, the food values are based on the work of Osmond (1948).

Weights and Measures.[b] For the degree of accuracy needed in dietary calculations, the conversion of grammes to ounces can be made by dividing by 30 (there are approximately 30 grammes to the ounce). One millilitre can be taken to weigh one gramme. In comparing Australian food value tables with those compiled overseas, care should be taken not to confuse the pint used in the United States of America, which contains 16 ounces, with the imperial pint of 20 ounces, used in Australia.

Calories, Carbohydrates and Fat.[c] To conform with the Recommended Dietary Allowances of the National Research Council of America (revised 1948), which are used as a basis for rating diets, the table omits values for fat and carbohydrates. Both these nutrients are reflected in the Calories. This procedure means greater simplicity in the table, and when a diet as a whole is given a rating as was described by Burke (1947), a separate value for carbohydrate and fat may give a disproportionate weight to these two nutrients, as they are already included in the caloric value. In the general evaluation of a diet which is deficient in Calories, it is important that the protein value be rated lower, since some of the protein will be used for caloric needs and not for growth and repair.

Phosphorus.[d] Because values for phosphorus are not given in the Osmond tables, this nutrient is not included in the simplified table.

Calcium.[e] The calcium which occurs in food in association with oxalic acid has been found (Fairbanks and Mitchell, 1938) to be unavailable, owing to the formation of the insoluble calcium oxalate; the two foods in common use in Australia which have a high oxalate value are silver beet—generally called spinach—and rhubarb, therefore the calcium values for these two foods should be disregarded. Although there is evidence (McCance and Widdowson, 1942) that the calcium of bread is rendered unavailable by combination with phytin, many other factors are known to influence the attachment of calcium to the phytic acid molecule. These factors include the presence of other basic radicles, such as iron and magnesium, and the extent to which phytic acid phosphorus can be liberated from the phytin molecule by phytase activity (Spitzer *et alii*, 1948). Until more information is available, therefore, the calcium of wholemeal bread should be included in calculations. The calcium figures have been taken to the third decimal place, since the calcium allowances are given in grammes. Those of other vitamins and minerals are given in milligrammes.

Iron.[f] It is impossible to estimate the amount of iron that is rendered unavailable to the body by attachment to the phytic acid molecule.

Available Carotene.[g] An estimate for available carotene is being used in association with a reduced daily allowance for carotene, based upon the recommendations of the Vitamin A Sub-Committee of the Accessory Food Factors Committee of the Medical Research Council of Great Britain (Hume and Krebs, 1949). The sub-committee recommended that divisors be used to estimate the available carotene in the various foods. The divisors are far from complete. Fruit and tomatoes were treated in the same way as cabbage and spinach, on the assumption that their texture was closer to these two vegetables than to that of carrots and root vegetables. The divisors for calculating the available potency in terms of vitamin *A* are as follows: (i) carrots, boiled, sliced, 4·0; (ii) carrots, domestic *purée*, 4·0; (iii) carrots, homogenized, 1·8; (iv) cabbage, spinach, 2·5; (v) β-carotene in fat, 1·3. Other root vegetables are calculated as carrots, and other leafy vegetables are calculated as cabbage and spinach. The following is an example of the use of these factors in estimating available carotene. The carotene value of silver beet is given by Osmond (1948) as 1293 international units of carotene per ounce of edible portion; the available carotene would be 1293 international units divided by 2·5, or 517·2 international units. All the factors affecting the availability of carotene from the various sources are not known, but the recent recommendation by the British workers was based on absorption by human subjects. Xanthophyll has been shown by Kelly and Day (1948) to have an inhibitory effect on the utilization of both carotene and the preformed vitamin *A*. On the other hand, the beneficial results of the presence of the tocopherols on the absorption of vitamin *A* has been noted by several workers, and Hickman (1943) showed that the optimum level of tocopherol needed to insure maximum usage of β-carotene was considerably higher than that required for optimum utilization of the preformed vitamin.

Thiamine.[h] Thiamine is the only vitamin of the *B* complex for which Australian figures are available.

Bread.[i] Bread is usually recorded as the number of slices that an individual would eat at a meal or in a day. There are two types of bread commonly used in Australian homes—that which the housewife refers to as ordinary bread, and the "Procera" type. The food values are comparable, so that the same figures can be used, but care should be taken to use a comparable weight, as a slice of ordinary bread weighs approximately one and a quarter ounces, while the same size slice of the "Procera" type would weigh only one ounce.

Cheese.[j] Processed cheeses are frequently used in Australian dietaries, but only cheddar type is listed in the Osmond figures. From personal correspondence with the manufacturers of the processed cheeses, it was found that, as far as the two most important nutrients, calcium and protein, are concerned, the food values are comparable with the cheddar types. Cheese and milk are the main dietary sources of riboflavin.

Milk.[k] For practical purposes milk is not considered a good source of iron. The figure given by Osmond was rejected because it is customary to compare the nutritive content of one ounce of cheese with six ounces of milk. The Osmond figures allow this comparison to be made for protein and calcium content of the two foods, but not for iron. In the scientific literature, owing possibly to the ease of iron contamination, the iron analyses of foods have been somewhat unreliable. In order to make the cheese and milk comparison valid, the iron figure in an earlier set of Australian food composition tables compiled by Marston and Dawbarn (1944) was substituted for the Osmond figure.

Meat.[l] According to individual food habits, there is a wide variation in the amount of fat consumed with meat, and it is important, particularly in Australia, where there is a high consumption of lamb and mutton, to know whether

TABLE I.[1]

Simplified Table of Food Composition for Use in the Evaluation of Australian Diets.[a]

Food, Description and Approximate Measure.	Approximate Weight.[b]		Calories.[c]	Protein.		Minerals.[d]		Vitamins.			
	Ounces.	Grammes.		Animal. (Grammes.)	Plant. (Grammes.)	Calcium.[e] (Grammes.)	Iron.[f] (Milligrammes.)	Available Carotene. (International Units.)[2] [g]	Vitamin A. (International Units.)	Ascorbic Acid. (Milligrammes.)	Thiamine. (Milligrammes.) [h]
Breads[i]:											
White: 1 slice ¾" thick sandwich loaf	1¼	38	90		2·6	0·008	0·4	0	0	0	0·04
60/40 Wholemeal: 1 slice ¾" thick sandwich loaf	1¼	38	86		2·9	0·008	0·8	0	0	0	0·08
Cereals:											
Barley: Approximately 2 level tablespoons, amount used in one cup of thick barley broth		Dry 25	88		1·9	0·002	0·2	0	0	0	0·03
Macaroni, spaghetti or vermicelli, cooked: ½ cup equals 4 ozs.	4	Dry 25	93		2·7	0·006	0·4	0	0	0	0·04
Pre-cooked cereal, puffed or flaked, ready to eat, average of wheat, maize, rice, ½ cup	½	15	52		1·2	0·003	0·6	0	0	0	0
Rice, polished: Approximately 2 level tablespoons		Dry 25	90		1·2	0·001	0·1	0	0	0	0·02
Sago, tapioca: Approximately 2 level tablespoons		Dry 25	90		0·1	0·002	0·2	0	0	0	0
Semolina type: ¼ cup made from 1 oz. dry *plus* 4 ozs. water		Dry 30	103		2·3	0·005	0·3	0	0	0	0·04
Whole cereal, oatmeal, rolled oats *et cetera*: ¼ cup made from 1 oz. dry *plus* 4 ozs. water		Dry 30	106		3·4	0·016	1·2	0	0	0	0·16
Dairy products:											
Butter: 2 level tablespoons	1	30	210	0·3		0·004	0	511	861	0	0
Cheese, cheddar type and processed cheeses[j], 1½" cube	1	30	118	7·1		0·230	0·2	123	208	0	0·01
Cream, heavy (35% butter fat): 2 tablespoons	1	30	96	0·7				219	369	0	0
Milk[k], liquid, whole, pasteurized and unpasteurized: 1 imperial pint	20	600	379	19·3		0·700	0·4[k]	489	823	5·8	0·23
Eggs:											
One egg (edible portion of one average-sized egg weighs 1¾ ozs.)		50	80	6·3		0·030	1·5	385	350	0	0·08
Fish:											
Canned salmon, bones eaten	1	30	49	5·8		0·085	0·4	0	0	0	0·03
Canned sardines in oil	1	30	60	7·3		0·113	1·1	0	0	0	—
Fatty—mullet, herring, edible portion	1	30	51	5·2		0·011	0·3	0	0	0	0·02
Non-fatty, edible portion	1	30	29	5·2		0·010	0·3	0	0	0	0·02
Meat:											
Average cuts[l]:											
Lean cooked, including rabbit and poultry (1 average cooked lean loin chop, edible portion)	1	30	60	6·0		0·004	0·8	0	0	0	0·02
Medium fat, cooked	1	30	90	6·0		0·004	0·8	0	0	0	0·02
Very fat, cooked	1	30	132	6·0		0·004	0·8	0	0	0	0·02
Bacon, raw: 1 strip, long, cut very thin[m]	¼	10	30	1·8		0·001	0·1	0	0	0	0·08
Brains, calf and sheep, cooked	1	30	22	2·6		0·004	0·6	0	0	0	0·02
Kidneys, cooked[n]	1	30	29	3·9		0·003	3·8	0	284	0	0·04
Liver, sheep's (lamb's fry)[m]	1	30	42	4·8		0·003	3·9	0	12,758	0	0·06
Pork or ham, cooked[o]	1	30	90	6·0		0·004	0·3	0	0	0	0·12
Prepared meats, devon *et cetera*: 1 thin slice of devon	½	15	33	2·0		—	—	—	—	—	—
Sausages, large, grilled (6 to the pound when raw): 1 sausage[p]	1½	45	92	4·8		0·012	0·6	0	0	0	0·07
Tongue, sheep, calf, cooked[q]	1	30	54	3·2		—	—	0	—	0	0·02
Tripe, cooked[q]	1	30	14	2·8		—	—	—	—	—	—
Vegetables[r] and fruit:											
Beans, french, runner type, cooked: scant ½ cup or 1 heaped serving spoon	3	90	24		0·9	0·027	0·6	170	0	9·0	0·05
Cabbage, cooked: scant ½ cup or 1 heaped serving spoon	3	90	21		1·2	0·033	0·9	306	0	24·0	0·05
Carrots, cooked: scant ½ cup or 1 heaped serving spoon	3	90	30		0·6	0·042	0·6	5,316	0	1·5	0·04
Cauliflower, cooked: scant ½ cup or 1 heaped serving spoon	3	90	21		2·1	0·018	0·9	0	0	30·0	0·06
Lettuce, green: scant ½ cup	1	30	5		0·3	0·007	0·2	454	0	4·0	0·02
Peas: scant ½ cup or 1 heaped serving spoon	3	90	63		4·8	0·012	1·5	170	0	13·5	0·19
Potato(es):											
Cooked in skin: 1 medium-large	4	120	92		2·4	0·008	0·8	0	0	27·0	0·14
Peeled before cooking, boiled or steamed: 1 medium	3	90	69		1·8	0·006	0·6	0	0	10·1	0·08
Peeled before cooking, baked or chipped potatoes (add 4 grammes fat for every 3 ozs.)	3	90	105		1·8	0·006	0·6	0	0	10·1	0·08
Peeled before cooking and mashed	3	90	69		1·8	0·006	0·6	0	0	5·1	0·08
Pumpkin: scant ½ cup or 1 heaped serving spoon	3	90	36		1·2	0·018	0·6	319	0	4·5	—
Silver beet (called spinach): scant ½ cup or 1 heaped serving spoon	3	90	33		2·1	0[e]	1·5	1,552	0	13·5	—
Swedes: scant ½ cup or 1 heaped serving spoon	3	90	30		0·9	0·048	0·3	0	0	16·5	0·02
Tomato:											
Raw, 1 medium	4	120	24		1·2	0·015	0·4	640	0	24·8	0·07
Cooked: 1 medium equals ½ cup	4	120	24		1·2	0·015	0·4	640	0	12·4	0·05
Other vegetables[t] of low nutritive value—beetroot, celery, cucumber, marrow, onion, parsnips: scant ½ cup or 1 heaped serving spoon	3	90	24		0·9	0·027	0·4	0	0	3·5	0·03

[1] The explanatory notes indicated by superior letters are given in the text.

[2] "0" means a "nil" content, or so small a value that it can be disregarded. The sign "—" means that no reliable figures are available.

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TABLE I.[1]—*Continued.*

Simplified Table of Food Composition for Use in the Evaluation of Australian Diets.[(a)]—*Continued.*

Food, Description and Approximate Measure.	Approximate Weight.[(b)]		Calories.[(c)]	Protein.		Minerals.[(d)]		Vitamins.			
	Ounces.	Grammes.		Animal. (Grammes.)	Plant. (Grammes.)	Calcium.[(e)] (Grammes.)	Iron.[(f)] (Milligrammes.)	Available Carotene. (International Units.)[1][2][(g)]	Vitamin A. (International Units.)	Ascorbic Acid. (Milligrammes.)	Thiamine. (Milligrammes.)[(h)]
Vegetables[(r)] and fruit:											
Bananas, as purchased: 1 very small	3	90	51		0·6	0·004	0·30	17	0	5·1	0·03
Pineapple, smooth-leafed variety: $\frac{1}{2}$ slice $\frac{1}{2}$" thick, edible portion	1	30	16		0·1	0·003	0·10	11	0	4·0	0·02
Oranges (use for all citrus), as purchased: 1 medium[(u)]	5	150	50		1·0	0·044	0·50	128	0	53·0	0·08
Pawpaw: 4 ozs. as purchased, 1 medium serving	4	120	24		0·4	0·010	0	362	0	43·6	0·02
Other fruit, raw (average of apple, cherries, pear, peaches, nectarines, plums): average serving $\frac{1}{2}$ cup	4	120	56		0·4	0·008	0·40	17	0	6·7	0·03
Stewed or tinned fruit, less 50% ascorbic acid, less 25% thiamine, *plus* 1 oz. sugar[(v)]	4	120	176		0·4	0·008	0·40	17	0	3·9	0·02
Dried fruit, apricots: 4 to 6 halves, cooked equals 50 grammes dry *plus* 2 level tablespoons, equals 20 grammes sugar	4	120	225		1·9	0·055	1·30	3,150	0	0	—
Dried fruit, prunes: 4 or 5 halves, cooked equals 50 grammes dry *plus* 2 level tablespoons, equals 20 grammes sugar	4	120	208		1·2	0·019	1·45	830	0	0	0·06
Other dried fruit, average, dates, raisins, sultanas, currants: $\frac{1}{4}$ cup	1	30	80		0·5	0·020	0·50	7	0	0	0·01
Miscellaneous biscuits:											
Dry, 3 biscuits	$\frac{3}{4}$	20	88		1·6	0·004	0·2	0	0	0	0·02
Sweet: average of plain sweet and fancy sweet: 3 biscuits	1	30	126		1·5	0·01	0·2	0	0	0	0·01
Cakes[(w)]:											
Plain: approximate size, $2\frac{1}{2}$" × $2\frac{1}{2}$" × 1"			214	1·0	2·1	0·011	0·5	64	58	0	0·04
Iced or filled with sugar filling: $\frac{1}{10}$ thick icing—1 oz. per serving	1		334	1·0	2·1	0·011	0·5	64	58	0	0·04
Iced and filled, add an extra 240 Calories to plain cake			454	1·0	2·1	0·011	0·5	64	58	0	0·04
Rock cake, home-made biscuit, use $\frac{1}{2}$ piece plain cake			107	0·5	1·0	0·006	0·2	32	29	0	0·02
Sponge cake: 1/6 of 7" sandwich tin			191	3·2	2·1	0·026	1·1	192	175	0	0·07
Gravy:											
Thick, made with fat and flour: $\frac{1}{2}$ pint, about 3 tablespoons	$2\frac{1}{2}$	75	100		0·8	0	0·12	0	0	0	0
Puddings[(w)]:											
Blancmange: 1 large serving	5		181	4·5	0·3	0·18	0·1	122	206	1·5	0·06
Custards: 1 large serving	5		148	5·9		0·16	0·88	290	340	1·2	0·09
Custards with added carbohydrates—bread and butter, sago, tapioca, macaroni, rice: 1 large serving	5		198	5·9		0·16	0·88	290	340	1·2	0·09
Ice cream: 1 small cone	$1\frac{1}{2}$	45	72	1·8		0	0	0	0	0	0
Jelly: 1 large serving	5		80	6·0		0	0	0	0	0	0
Junket (count as milk *plus* $\frac{1}{2}$ oz. sugar): $\frac{1}{4}$ oz. sugar supplies	$\frac{1}{4}$	8	32	0		0	0	0	0	0	0
Pastry[(x)], pie crust: 1 square 2" × 1" thick			273		3·2	0·009	0·40	0	0	0	0·05
Steamed pudding, same as plain cake.											
Sauces:											
Sweet white sauce, custard powder custard: $\frac{1}{2}$ pint, 2 to 3 tablespoons	$2\frac{1}{2}$	75	78	2·5	0·4	0·090	0·11	61	103	0·8	0·03
White sauce, medium to thick, made with fat, flour and milk: $\frac{1}{2}$ pint, 2 to 3 tablespoons	$2\frac{1}{2}$	75	134	2·5	0·4	0·090	0·11	61	103	0·8	0·03
Scones:											
Plain: approximate size, 2" diameter × 1" thick			81	0·5	2·1	0·026	0·3	13	21	0	0·03
Sugars[(y)]:											
Chocolate, average plain, milk	1	30	150			0·056 (milk)					
Sugar, jam, honey, syrup, lollies: 2 level tablespoons	$\frac{3}{4}$	20	80								

[1] The explanatory footnotes indicated by superior letters are given in the text.

[2] "0" means a "nil" content, or so small a value that it can be disregarded. The sign "—" means that no reliable figures are available.

the meat actually eaten should be classed as fat, medium fat or lean. In the simplified table three figures for meat are included, differing in their calorific value. Each figure represents an average of two ounces of beef and one ounce each of lamb and mutton. One loin chop, lean and cooked, weighs approximately one ounce, without bone.

Bacon.[(m)] Great variation occurs in the caloric content of cooked bacon, owing to the different degrees of crispness preferred. In some cases the fat from the bacon is used to fry eggs or tomatoes and some of the fat would be absorbed in these foods; for these reasons raw bacon has been listed in the simplified table.

Kidneys and Liver.[(n)] Kidneys and liver are excellent sources of *B* complex vitamins.

Pork and Ham.[(o)] Pork and ham are not eaten in large quantities by the average Australian. The figures in the simplified table are an average of pork and ham from the Osmond table, with a 50% reduction of thiamine in pork to allow for cooking losses. These two meats have been listed because of the high thiamine content of pig products. The Calories and protein follow the "average fat" meat value; but if pickled pork or other cuts of known high fat content are used, then the Calories for "fat" meat should be taken —that is, 132 Calories per ounce.

Sausages.[(p)] A wide variation occurs in the food value of sausages and there is considerable reduction of weight during grilling. Because sausages have varying amounts of beef and pork in them, the pork sausage and beef sausage figures of Osmond have been averaged with the usual deduction for cooking loss of thiamine.

Tongue and Tripe.[(q)] Tongue and tripe are listed separately because of their low protein value.

Vegetables.(r) To estimate the cooking loss for vegetables, the figures as suggested by Osmond have been used—that is, 25% loss for thiamine and 50% loss for ascorbic acid.

Potatoes.(s) There is a seasonal variation in the vitamin content of potatoes; for the purpose of the simplified table the different values have been averaged. There is evidence that potatoes cooked in their jackets retain almost all their ascorbic acid content (Hewston *et alii*, 1948). The ascorbic acid loss in cooking peeled potatoes and then mashing them has been estimated.

Vegetables of Low Nutritive Value.(t) The carbohydrate value of the vegetables in this group varies, but it is considered sufficiently accurate to group them together, as their vitamin contents are low, and when compared with concentrated carbohydrate foods the differences in carbohydrate value between the vegetables appear unimportant. Care should be taken not to use this particular grouping for calculating diabetic diets.

Oranges.(u) The seasonal variation of the ascorbic acid value of oranges has been averaged, and the fruit is listed as the "as purchased" value rather than as "edible portion", since most Australian dietaries include a piece of fruit and not orange juice or orange slices.

Stewed Fruit.(v) If rhubarb is the stewed fruit to be calculated, then the calcium should be disregarded. (See note (e).)

Scones, Cakes and Puddings.(w) Standard Australian recipes are taken from "The Commonsense Cookery Book" (1949). The basic foods used in the recipes were calculated on a per serving basis.

Pastry.(x) The type of pie used as a dessert in Australian dietaries is different from that appearing in the American food pattern. The food value of a piece of pastry in combination with a serving of stewed fruit can be used for a serving of pie.

Sugars.(y) Some food value tables give nutrients other than Calories for this group; but, from the point of view of calculating daily diets, the caloric intake is the one affected by the ingestion of sugars. It is hard to assess the effect of a high intake of this type of food on the requirement of other nutrients; for example, the need for thiamine increases with an increasing quantity of concentrated carbohydrate.

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THE DIETS OF A GROUP OF PREGNANT WOMEN LIVING IN SYDNEY.[1]

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NUTRITIONAL STATUS is dependent on long-standing dietary practices; therefore one of the challenges which must be met by research workers in applied nutrition is the assessment of the food habits of humans. Lusk, writing in 1931 of his teachers, the German physiologists Voit and Rubner, stated that their standards of nutrition, which were postulated at the turn of the twentieth century, "simply showed what the average laborer in habit consumed". The goal of the dietary history method used in the present study is to find out what an individual Australian woman "in habit consumed" previous to and during her pregnancy.

Method Used to Collect Dietary Data.

The method used in this investigation was developed over a period of eighteen years by Bertha S. Burke (1947) at the Harvard School of Public Health, and immediately before commencing to collect data in Australia I undertook special training at the Harvard School of Public Health to learn the technique. In the Australian study all the interviews were conducted by one interviewer (myself), aiming at uniformity within the study and as close a comparison as possible with the methods used in the published work by the Harvard group (Burke *et alii*, 1943*a*, 1943*b*, 1943*c*, 1949). In the absence of standardized methods, such as those which chemists use, it is important in any discussion of methods of evaluating diets to clarify the terminology. For example, the term "dietary history" has many meanings in the nutrition literature, which vary in accordance with an investigator's own development and use of this tool. The "Burke Dietary History Method" should not be confused with the somewhat loosely used term "dietary history" often referred to in clinics. A previous report (Woodhill, 1951) discussed in detail the Burke dietary history and why it was chosen for the present study in preference to other methods, which use weighing or recording of the food intake for an isolated day, week or month, as the case may be. Details of the procedures and forms have been described (Burke, 1947); these were used in the present study with a few modifications because of differences in the Australian food habits and cultural pattern. As was explained by its originator, a thorough knowledge of food habits, buying practices and home management of the community from which the subjects are drawn is essential to the taking of a reliable Burke dietary history. In this study care was exercised to explain effectively to the subjects that they were selected for the study group by chance and because they appeared to be normal pregnant women. It was stressed that the investigator intended to give them extra time, attention and study during their pregnancy. In all cases the word

[1] This paper is abstracted from the thesis leading to the degree of doctor of science granted in 1951 from the School of Public Health, Harvard University, Boston, Massachusetts, United States of America. The research was made possible by grants from the King George V and Queen Mary Maternal and Infant Welfare Foundation, Sydney, Australia, and from the James Foundation through the Department of Maternal and Child Health, Harvard School of Public Health, Boston, Massachusetts.

"study" was substituted for "research". This was considered important, because when a woman is pregnant she resists any measure which would imply experimentation. The subject's confidence in the motives of the interviewer was highly desirable, as the Australian housewife is an extremely independent and busy person and would not submit to many tedious questions unless she could understand the reason for their being asked. During the first interview information was sought about the subject's family, mode of living, housekeeping and usual food habits. In most cases a period of a year before pregnancy was discussed in detail, and an estimation was made of her long-term food habits. This was followed by questioning with regard to changes in food intake since the beginning of pregnancy. A second interview was scheduled to take place between the thirty-sixth and fortieth weeks of gestation; at this time the interviewer concentrated on any changes which had occurred since the first interview and tactfully checked the data from the first interview. As soon as the subject was out of bed after her confinement she was interviewed for a third time and weighed. If she returned for a post-natal clinic visit she was interviewed again. More frequent discussion than this would introduce several hazards in collecting reliable dietary data; the subjects tend to become nutritionally educated as a result of the several interviews and either change their food habits or gain knowledge about food which would colour their answers.

Calculation of Diets.

The diets were calculated from the food composition tables of Australian foods which were compiled by Osmond (1948). Many of the food items were collected by weekly intakes and divided by seven to give an "average" day. The object of the "Burke Dietary History Method" is to calculate not an isolated daily intake, but an "average" intake made up of proportional parts contributed by foods consumed over a considerable period of time. In practice it is found that in the case of most foods it is necessary that the subject consume them at least once in two weeks if the food is to contribute appreciably to the nutrients for the "average" day. The most notable exception to this is the intake of liver. If four ounces of liver per month are eaten, the theoretical nutritive value for the "average" day is affected by this intake.

Rating the Diets.

The term "rating" is used in this study to express the procedure of placing a particular diet in one of the five categories which pass from "very poor" through "poor", "fair", and up to "good" and "excellent". This procedure requires some type of standard on which to base the empirical dividing lines between the five categories. The daily dietary allowances which were recommended by the Food and Nutrition Board of the National Research Council of U.S.A. (1948) were adopted. The only exception is the allowance for carotene and pre-formed vitamin *A*; the allowance for these two nutrients, which has been used in the rating of diets, was based on the requirement suggested by Hume and Krebs (1949). For each subject in the study at least three periods were rated separately; these three periods were: previous to pregnancy, the first half of pregnancy, and the latter half of pregnancy. In some cases more than three periods were needed to give a picture of long-term and "average" food habits. In order to arrive at a general dietary rating for each period, the following nine nutrients were calculated from the dietary history of each period: Calories, protein, calcium, iron, vitamin *A* and/or available carotene, thiamine, riboflavin, niacin, ascorbic acid. Each nutrient was assigned a numerical value, which corresponded to the five classes cited above ("very poor", "poor", "fair", "good" and "excellent"). An arbitrary standard applicable to each nutrient was taken to categorize the various nutrients, the class intervals being certain percentages of the adopted daily allowance. With respect to each nutrient, cases in which the standard fell below 50% of the allowance were classed as "very poor" and given the value of "0". Those which fell within the range of 50% to 60% inclusive were classed as "poor" and the nutrient given the value of "1"; those which fell within the range of 61% to 79% inclusive were classed as "fair" and that particular nutrient given the value of "2"; while cases in which the standard reached 80% but did not meet the allowance, were classed as "good" and given the value of "3". A diet containing a nutrient which met or exceeded the allowance was classified as "excellent" for that particular nutrient and given a value of "4" with respect to the nutrient (Burke *et alii*, 1943*a*).

"Mean General Rating" for a Specific Period.

After the specific nutrients had been calculated and each assigned a numerical value, then they were averaged, each of the nine carrying equal weight when the mean was being computed. Each dietary period that had been calculated was assigned a "mean general rating". The following values were assigned to each of the five groups: "very poor", less than 1·1; "poor", 1·1 and less than 1·8; "fair", 1·8 and less than 2·8; "good", 2·8 and less than 3·2; "excellent", 3·2 and above. (Burke *et alii*, 1949.)

Selection of Subjects.

The study was undertaken in Sydney in the years 1948, 1949 and 1950, and the subjects included were selected from the women attending the ante-natal clinic at King George V Memorial Hospital for Mothers and Babies. The subjects were chosen after their first clinic visit, during which an obstetric history and the results of an examination were recorded as a routine measure in each clinic record by the staff obstetricians. If any significant abnormality was noted at this first examination, the subject was not selected for interview, nor was any patient included whose blood pressure on the initial visit was recorded as being above 130 millimetres of mercury, systolic, and 80 millimetres, diastolic (National Health and Medical Research Council, 1948). Subject to these restrictions, the women were selected from the appointments book and interviewed on their second visit to the clinic; all subjects were interviewed in the first trimester of their pregnancy. In the selection of the subjects only Australian-born women were chosen.

The method described above was used to select the subjects for interview before any attempt was made to obtain a dietary history. Some of the subjects selected for interview were rejected because it was impossible for the interviewer to obtain from them a reliable history. Smith and Stuart (1948) support this procedure, stating that "inaccurate histories of vague information should be rejected as ruthlessly as would be laboratory measurements made with dirty glassware". As this procedure was followed, the sample cannot be described as a random sample of patients attending the antenatal clinic at King George V Hospital. But on the other hand, it was considered that if histories were included which were of doubtful reliability, any conclusions drawn from a group which included such histories would be of doubtful validity. However, the exclusion of unreliable histories does not necessarily produce a bias either towards good diets or towards poor diets, as the quality of the diets is not related to the ability of the subject to give the necessary information to the interviewer.

Table I shows the number of subjects who were interviewed for the purpose of providing a dietary history, and the number who were rejected for various reasons after the first interview. The two subjects who did not return to the clinic and from whom no further information could be obtained are representative of what may occur in any clinical research study. The 14 patients who were rejected owing to factors inherent in the patient give a measure of the number of women, under the conditions of this study, from whom the interviewer was unable to obtain a reasonably reliable dietary history. Such a group will always be present in a study of this type, and any selection of patients which does not allow for rejection of subjects on these grounds would imply that included with the more reliable histories are some unreliable ones. The seven subjects who were dropped owing to factors relating to the interview represent errors which may be expected when research is conducted in a busy clinic, the main purpose of which is to provide a service for the com-

munity. Six subjects were dropped owing to the development of abnormalities or symptoms after the first medical examination. Rejects and reasons why rejections are made should appear in any discussion of selection of a sample for this type of study. It will be clear from the foregoing remarks why the present sample cannot be referred to as a random sample. The criterion for including a subject in this study, in addition to the requirements of birth and normality cited above, was that it was possible to obtain from her reasonably reliable dietary data.

TABLE I.

Reasons for Dropping 21 Cases from a Series of 215 Cases.

Cases Dropped.	Number of Cases.	Percentage of Total.
Cases dropped owing to factors relating to the subjects:		
Failure to return to clinic	2	0·93
Answers to questions unsatisfactory owing to		
Opposition or lack of interest	4	1·86
Psychological disturbances	7	3·26
Ignorance in buying or cooking	1	0·47
High motivation for changing food habits	2	0·93
Development of abnormalities, symptoms *et cetera* after the initial medical examination:		
Twins	1	0·47
Gestation too far advanced for inclusion in the series	1	0·47
Elevated blood pressure on second visit to clinic	2	0·93
Diagnosis of tuberculosis	1	0·47
Diagnosis of gall-stones	1	0·47
Cases dropped owing to factors relating to the interview:		
Interviews, admission to hospital or confinement missed	5	2·33
Interrupted interview	1	0·47
Fatigue of interviewer	1	0·47
Total number of dropped cases	29	13·5
Total number of cases included in the study	186	86·5
Total number of subjects interviewed	215	100·0

Description of Subjects.

Racial Stock.

From 1788, when the white settlers landed in Sydney Cove from the First Fleet, until the end of the second World War in 1945, immigration to Australia was mainly from the British Isles, and no large-scale population movement took place from any other countries. The white Australian population shows a high degree of homogeneity with respect to racial stock. In the Census of the Commonwealth of Australia (1933),[1] 98·15% of the Australian population claimed British nationality. During the last fifty years (1895-1945) at least, the only replenishment of the Australian population was from a low natural rate of increase, individual settlers from Britain and small isolated groups from other countries. This homogeneity results in a dietary pattern derived from the British Isles, and one which is not influenced by a variety of national food habits.

The Socio-economic Status of the Subjects.

The ante-natal clinic of the King George V Memorial Hospital for Mothers and Babies, from which the group of pregnant women for this study was selected, is situated in the city of Sydney between an industrial suburban area and the grounds of the University of Sydney. The clinic is part of one of the most modern obstetric buildings in the country. It is an imposing edifice which would tend to overawe the extremely poor mother. Table IIB shows that the husbands of 91% of the group earned £6 per week or more; in addition there would be a tendency to underestimate the wages rather than overestimate them, as the subjects knew that assessments for clinic charges were made on their statements of income. The income figures quoted in Table IIB should not be regarded as exact financial data; but they proved to be useful when checking quantities of the more expensive types of food purchased. In the dietary history interviews no further questioning of the subjects on income was attempted, as it was believed that further discussion would only serve to damage *rapport* between the interviewer and the subject. No woman in the group worked outside the home beyond the end of the first trimester of her pregnancy, and none gave any indication that she planned to work after the birth of her child. This is in accordance with the Australian cultural pattern.

[1] Information on nationality did not appear in the more recent census.

TABLE IIA.

Social and Economic Status of Subjects: Distribution of Occupations of Husbands.

Classification.	Number of Cases.	Percentage of Total.
Semi-skilled	52	27·96
Skilled	48	25·81
Unskilled	30	16·13
Clerical	22	11·83
Government employees	14	7·53
Self-employed	10	5·38
Servicemen	6	3·23
Professional	2	1·08
Supervisory employees	2	1·08
Total	186	100·03

At the time when the study was undertaken, wages and food costs were considered to be high. Almost all subjects complained about the high cost of food; but they could afford enough food to satisfy the hunger of their families, although in some cases milk, fruit and meat were not consumed in sufficient quantities, the mothers stating that, in their opinion, they could not afford enough of these foods to follow the suggestions made by community nutrition education programmes. Milk is regarded in the Australian food pattern as a beverage which can well be dispensed with if the "housekeeping money" is running low, and this attitude was reflected by some of the subjects in the present study. The dietary histories of the subjects revealed the typical food pattern of Australians, relatively simple and stereotyped, which is probably due to the homogeneity of racial stock. Tables IIA and IIB show frequency distributions of the occupations and incomes of the subjects' husbands. These data were taken from the hospital records. It can be seen that 70% of the husbands of the subjects were employed as skilled, semi-skilled or unskilled workmen. During the year in which the subjects were selected for the study (September, 1948, to August, 1949) the average basic wage[1] for Sydney was £6 3s. 2d. per week.

TABLE IIB.

Distribution of Weekly Wages of Husbands.

Weekly Wages.	Number of Cases.	Percentage of Total.
Under £5	3	1·61
£5 to £6	13	6·99
£6 to £7	32	17·20
£7 to £8	76	40·86
£8 to £9	44	23·66
£9 to £10	15	8·06
£10 to £11	3	1·61
Total	186	99·99

Classification of the Subjects' Diets.

Table III shows the general "mean" rating of maternal diets, the number of cases and the percentage of the total

[1] Basic wage is the minimum wage fixed by the Australian Arbitration Court for a forty-hour working week.

TABLE III.
General "Mean" Rating of Maternal Diets.

General "Mean" Rating of Maternal Diets.	Previous to Pregnancy.		Pregnancy, First Half.		Pregnancy, Second Half.		Pregnancy, Total (Average).	
	Number of Cases.	Percentage of Total.	Number of Cases.	Percentage of Total.	Number of Cases.	Percentage of Total.	Number of Cases.	Percentage of Total.
Indefinite[1]	11	6	11	6	11	6	11	6
Very poor	27	15	9	5	37	20	19	10
Poor	42	23	22	12	44	24	33	18
Fair	76	41	49	26	69	37	62	33
Good	15	8	28	15	17	9	43	23
Excellent	15	8	67	36	8	4	18	10
Total	186	—	186	—	186	—	186	—

[1] This class contains subjects who aborted or vomited, making it impossible to calculate all three periods.

in each diet group. Various periods of time appear in Table III; the "previous to pregnancy" period covered about a year prior to the present gestation, and included estimations of the important changes in food habits during this time. The first half of pregnancy showed an improvement in the dietary rating, due to an increased appetite in some cases, and in others to a conscious effort to follow the community nutrition education which, in various ways, influences many expectant mothers in Sydney. During this period the National Research Council allowances are not increased. The second half of pregnancy is the average of the dietary histories taken during the last twenty weeks of gestation. Many diets for which an improved rating was given during the first half deteriorated when the second half was rated, owing in most instances not to a change in food intake, but to the greatly increased nutrient allowances recommended by the National Research Council for the last half of pregnancy. The total pregnancy rating is the average of the ratings for the first and second halves of the gestation period. This tends to mask both the improvement of ratings in the first half of pregnancy and the deterioration which occurred in the second half. As was previously stated, these dietary percentages should not be interpreted to apply to the Australian population; but they do demonstrate that many pregnant women in this study did not eat diets which met the recommended (National Research Council, 1948) allowances. In the periods previous to pregnancy and the second half, 16% and 13% of diets respectively were classed as "good" or "excellent", while in the first half of pregnancy 51% of the subjects reached these high ratings. Previous to pregnancy 15% of the subjects were eating "very poor" diets; this percentage increased to 20 in the latter half of pregnancy. In these two periods the largest number of cases were in the "fair" diet group.

Table III shows six diet categories. The "indefinite" class included 11 subjects whose diets could not be calculated for one or more periods because the mothers either miscarried before completion of the pregnancy or because vomiting was so severe or confusing to the patient that a specific period could not be calculated.

Summary and Discussion.

1. The results of this study of 186 pregnant women show that previous to the pregnancy 15% of the group were eating diets which, in respect to most of the nine nutrients calculated, were less than 50% of the National Research Council's (U.S.A.) recommended daily dietary allowances. In the latter half of pregnancy this number increased to 20%. The National Research Council's allowances have been criticized as being too liberal; be this as it may, in comparison with any standard of daily requirements 50% of the National Research Council's allowance constitutes an inadequate diet, and the problem remains of locating those particular individuals among a group of pregnant women who need special nutritional advice during pregnancy.

2. Correlation of poor diet during pregnancy with the indices of inefficient or unsuccessful reproduction lies beyond the scope of this paper; but this study showed (Woodhill, 1951) that statistically it can be stated that there were women living in the city of Sydney who were eating diets of sufficiently low nutritive value to decrease their chances of having a completely successful pregnancy followed by a period of satisfactory lactation.

3. The data show that consumption of very poor diets was not related to poverty, as the subjects did not come from a very low economic group. However, today (1952) periodic scarcities of essential foods and the rising costs may have caused a deterioration in the diets of Australian mothers so that active programmes of nutrition education are important in the pre-natal care of Australian women. The results of this study indicate that dietary instructions should be given early in pregnancy, preferably on the second visit to the clinic, and again early in the latter half of pregnancy, when the fœtus makes its heaviest demands on the mother for the nutrients essential to its growth and development.

4. The importance of good nutritional status at the beginning of pregnancy has been demonstrated, and the assessment of maternal stores of nutrients must be made if one relies on the theory that the fœtus is completely parasitic on the mother. The adverse effects on the offspring from nutritionally depleted mothers have been repeatedly demonstrated in experiments with lower animals. The improvement of the diets of Australian mothers should start before pregnancy. One goal in the public health programmes to promote maternal and child health should be the education of young women in good dietary habits in preparation for motherhood.

Acknowledgements.

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Reviews.

MEDICINE FOR NURSES.

IN the preface of the second edition of "An Introduction to Medicine for Nurses", by Patria Asher, the author states that she has done her best to belie the statement that "it takes fifty years to get a discovery into the textbooks and another fifty to get it out again".[1] She certainly has done this, for the critical reader does not require a pathological empathy to appreciate the fact that all the latest ideas, as regards both general nursing details and drug therapy as well, have been included.

In our review of the first edition it was commented upon that only five of the common infectious fevers were dealt with, and it is pleasing to note that now this chapter has been enlarged to include all the acute infections and the exanthems of childhood. The various practical nursing procedures such as postural drainage for pulmonary and cardiac diseases are described and illustrated by excellent photographs and diagrams, and details are given of blood transfusion, lumbar puncture and artificial pneumothorax, which enable nurses to have a proper knowledge of the treatments that they are helping to carry out.

The subject matter throughout is written in an easily read fashion that will appeal alike to student nurses, tutor sisters and doctors who lecture to nurses, and the author in dealing with the diseases of the various systems of the body, has included sufficient details of a practical nature, without weighing down the work with facts, which, while they are necessary to doctors, yet are beyond the scope of nurses.

PROGRESS IN CLINICAL MEDICINE.

IN the preface to the second edition of "Progress in Clinical Medicine" the editors, Raymond Daley and Henry Miller, state that they have limited themselves to advances which they believe to be of permanent clinical value, and to methods already tested and used in the larger hospitals.[2] The thirteen chapters written by thirteen contributors cover a broad range of subjects relating to internal medicine and maintain a high standard of excellence throughout. Maurice Mitman writes on the control of infections and discusses the pathways of infection, methods of immunization, and the critical use of antibiotics. T. A. Lloyd Davies reviews some aspects of industrial medicine with particular reference to pneumonokoniosis and chemical pneumonitis. His summary of the hazards that attend the use of phosphorus insecticides is lucid and timely.

The chapter dealing with gastro-intestinal disorders is admirable. F. Avery Jones describes the complete clinical picture of hiatus hernia in four pages, including apt quotations from Allison and from Dick and Hurst. This is followed by discussions on peptic ulcer, chronic and infectious hepatitis, and ulcerative colitis. *Diabetes mellitus* is the main topic dealt with in the chapter on metabolic disorders, but there is a valuable section on potassium imbalance and the treatment of potassium deficiency. The chapter on cardio-vascular diseases commences with a classification of congenital heart disease which is, perhaps, not particularly illuminating without further amplification. The theory of electrocardiography and the use of the unipolar techniques is presented in a concise and clear fashion by M. B. Matthews, but, wisely, little attempt is made to elaborate on varying cardiographic patterns. The teachings of Ellis are given a prominent place in the chapter on renal diseases, and reference is made to the juxta-medullary shunt of Trueta and the Oxford school. The importance of careful adjustment of fluid balance and caloric intake in the treatment of acute uræmia is stressed and the dangers of overhydration are emphasized. The description of the hæmorrhagic diseases by M. C. G. Israels is brought into line with the latest research work on the clotting of the blood and a classification is presented which differs somewhat from the old text-book one. The difficult problem of hypersplenism is critically evaluated and the conclusion is reached that "there is thus reasonable evidence in favour of the clinical syndrome of hypersplenism and its logical treatment by splenectomy".

Modern concepts of treatment in pulmonary tuberculosis receive careful consideration by Howard Nicholson, who also discusses the differentiation and treatment of the pneumonias. Henry Miller classifies Parkinsonism and assesses the treatment of this condition with the modern drugs. Electroencephalography, poliomyelitis and toxoplasmosis also receive brief notice.

Endocrine disorders are difficult to bring up to date in a book of this nature, as the reports from the research laboratories are pouring forth so freely. Cuthbert Cope presents a reasoned account of some selected thyroid and adrenal disorders and a review of hypopituitarism, based largely on the work of Sheehan.

In the final chapters psychosomatic medicine, physical methods in psychiatry, and chronic rheumatic joint diseases are dealt with in a clear and stimulating manner.

There is no doubt that this book fills a need in the medical community. The general physician will read it with interest and profit. The candidate for a higher medical qualification will scan it carefully; even his examiner need not disdain to browse through its pages.

[1] "An Introduction to Medicine for Nurses", by Patria Asher, M.D., M.R.C.P., with a chapter on Mental Ill-Health by Portia Holman, M.A., M.R.C.P., D.P.M.; Second Edition; 1951. London: William Heinemann (Medical Books), Limited. 9" x 6", pp. 376, with 93 illustrations. Price: 25s.

[2] "Progress in Clinical Medicine", by various authors, edited by Raymond Daley, M.A., M.D. (Cambridge), M.R.C.P., and Henry Miller, M.D. (Durham), M.R.C.P., D.P.M.; Second Edition; 1952. London: J. and A. Churchill, Limited. 9½" x 6½", pp. 438, with 43 illustrations. Price: 30s.

Books Received.

[The mention of a book in this column does not imply that no review will appear in a subsequent issue.]

"Forensic Medicine", by Keith Simpson, M.D. (London); Second Edition; 1952. London: Edward Arnold and Company. 9" x 6", pp. 352, with 131 illustrations. Price: 21s.

Intended as a brief and practical guide to current teaching in forensic medicine.

"The Earliest Stages of Delinquency: A Clinical Study from the Child Guidance Clinic", by H. Edelston, M.B., D.P.M.; 1952. Edinburgh and London: E. and S. Livingstone, Limited. 7½" x 5", pp. 208. Price: 10s. 6d.

Sets out a psychiatric approach to the subject of delinquency.

"Fractures and Orthopædic Surgery for Nurses and Physiotherapists", by Arthur Naylor, Ch.M., M.B., M.Sc. (Sheff.), F.R.C.S. (England), F.R.C.S. (Edinburgh), with a foreword by Ernest Finch, M.D., M.S. (London), F.R.C.S. (England); Third Edition; 1952. Edinburgh and London: E. and S. Livingstone, Limited. 9" x 6", pp. 330, with 254 illustrations. Price: 22s. 6d.

An attempt to show nurses how the principles of surgery are applied in orthopædic surgery and as a supplement to her lectures in surgery.

The Medical Journal of Australia

SATURDAY, AUGUST 9, 1952.

All articles submitted for publication in this journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words or phrases.

References to articles and books should be carefully checked. In a reference the following information should be given without abbreviation: surname of author, initials of author, year, full title of article, name of journal without abbreviation, volume, number of first page of the article. If a reference is made to an abstract of a paper, the name of the original journal, together with that of the journal in which the abstract has appeared, should be given with full date in each instance.

Authors who are not accustomed to preparing drawings or photographic prints for reproduction are invited to seek the advice of the Editor.

THE ACUTE RADIATION SYNDROME.

THE first atomic explosions had a very evident psychological component, which not only blasted a way into men's minds at the time, but also raised a cloud of ideas that spread over the world; ever since a rain of words has been falling. Much of what has been thought and said is significant and worth attention. In the medical sphere a solid body of important facts and ideas has been built up. They fall into two main groups. The first group covers the broader problems related to the atomic bomb—defensive measures, morale, mass handling of casualties, and so on. Reference was made to many of these questions in a paper by Major-General Sir Samuel Burston as well as in a leading article, both in the issue of February 24, 1951, and sources of more detailed information were given there. The second group belongs to the more usual ways of medical thought and practice, and covers the effects of radiation and the other results of atomic explosion as a specific problem in pathology and clinical medicine. A good deal has been published as a result of experience with those involved in the Hiroshima and Nagasaki explosions, and comments on some of these reports were made in these columns on August 24, 1946, June 14, 1947, and March 4, 1950. However, a major gap in our knowledge and experience has related to the period immediately after exposure to radiation of the type associated with atomic explosion. Recently published supplementary data are of major significance in filling this gap. They are supplied by L. H. Hempelmann, H. Lisco and J. G. Hoffman,[1] in a study of nine cases of acute radiation injury resulting from two nuclear accidents which occurred in 1945 and 1946 at the Los Alamos Scientific Laboratory in the United States. The injuries, it is emphasized, are peculiar to a nuclear reaction on a limited scale and unaccompanied by biologically significant amounts of heat and blast, but they are of the same general type as those caused by a full-scale atomic explosion. Because of the unique character of these case histories they are reported in detail and their implications are discussed fully. The 230 pages of the report and its 22 coloured illustrations make up a work of reference that will be consulted by all interested in acute radiation injury.

Acute radiation syndrome is defined in the introduction to this study as "the group of signs and symptoms that characterize the illness produced by exposure to ionizing radiation of the entire body or a large part of the body". The illness runs an acute course lasting only a matter of weeks. It is to be differentiated, first, from the chronic form of radiation injury caused by repeated or protracted exposure of the body to radiation and manifested as gradually developing illnesses (such as aplastic anæmia and leuchæmia) and, second, from radiation injury produced by irradiation of a limited part of the body. In the cases reported the persons involved were exposed to bursts of penetrating ionizing radiations resulting from what are described as temporarily uncontrolled fission reactions. All were taken immediately to hospital for observation and treatment. Two died as a result of exposure. The remainder received smaller though, in most cases, clinically significant doses of total-body radiation, but they survived. One survivor showed typical manifestations of the acute radiation syndrome. Hæmatological changes were demonstrated in this patient, and in four of the six other exposed but asymptomatic persons. The constitutional reaction in the two fatal cases was characteristic. A prompt initial reaction (nausea, vomiting, prostration and mild fall in blood pressure) occurred on the first post-exposure day and, in one case, on the second day, and was followed by a period of comparative well-being, apart from the effects of local hand injury. Within a week the third, or toxic, phase supervened with increasingly high fever, pronounced weight loss and prominent gastro-intestinal symptoms, and despite supportive therapy death occurred in one case on the ninth day and in the other on the twenty-fourth day. Deviations in these two cases from what might be considered usual features of the acute radiation syndrome are believed to be related to uneven irradiation of the body and the magnitude of the radiation doses. In addition to the constitutional reactions, both patients sustained extreme damage to the tissue of their heavily irradiated upper extremities, and less pronounced but still severe damage to the skin of their bodies. The reaction of the upper extremities was almost immediate; subcutaneous œdema and changes in the peripheral blood-flow were followed by epidermolysis, the patient who survived for twenty-four days losing the skin of the forearms and hand, as well as suffering tissue necrosis and dry gangrene of the fingers. Only one survivor developed clinical signs of the acute radiation syndrome. He had an initial reaction, chiefly nausea and vomiting of moderate degree. Then, except for a short bout of fever and prostration, he was asymptomatic for the subsequent two weeks spent in hospital. During the third week he lost some scalp and beard hair, and also experienced severe fatigue on exertion; the fatigability persisted for several months. Five years after exposure he was in good health, but had developed bilateral radiation cataracts. The other

[1] *Annals of Internal Medicine*, February, 1952.

survivors had no symptoms of any kind, though the radiation doses of several did not differ greatly from the dose of the survivor with symptoms; all were in good health three and a half years after the accident.

The clinical laboratory findings in all cases and the post-mortem findings in the fatal cases are of considerable interest, but it is sufficient here to pass on to the two important general conclusions reached in the report; one relates to the nature or physiological basis of the acute radiation syndrome and the other to the present state of appropriate therapy. The first conclusion is that widespread destruction of tissues throughout the body is the basis for the physiological or clinical response. The destructive processes differ somewhat from those produced by other common toxic agents which originate outside the body. In the first place, the tissue damage and destruction are not confined to the surface of the body but, in the case of the penetrating radiations, occur primarily in the radiosensitive tissues, wherever they are located in the body. Secondly, the destruction is delayed rather than immediate, and the delay varies from one organ system to another. The reason for the latent period is that the radiation doses usually responsible for the syndrome tend to injure cells in such a way that many cells can survive until they attempt mitotic division. Since mitotic activity is inhibited by radiation exposure, cell death does not occur until the tissue regains its ability to proliferate. Hempelmann, Lisco and Hoffman state that if these peculiarities of tissue destruction are taken into consideration, the overall clinical or constitutional response of a person with the acute radiation syndrome is found to be similar to that observed in other diseases in which tissue death is prominent. The second main conclusion is that at present one can offer only supportive therapy directed at helping the patient to survive the acute phase of the illness. Although there are a number of means by which tissues can be protected to some extent against the damaging action of penetrating radiations, there is no certain method of saving doomed cells once injury has occurred. However, work reported since preparation of this study (it is mentioned in a footnote) indicates that injections of homogenized spleen or embryonal tissues will improve the survival rate of irradiated mice even if administered after exposure; transplantation of the spleen and of the bone marrow is also said to be effective in this regard. Hempelmann, Lisco and Hoffman further point out that there is every reason to believe that the regenerative powers of most tissues are so great that considerable, if not almost complete, recovery will occur if the patient survives the critical toxic stage of the illness. In this respect, antibiotics, transfusions and maintenance of the fluid and electrolyte balance are believed to be helpful. It is evident, however, that prevention is at present much more effective than cure. Apart from minor accidents, such as those which form the basis of the report that we have been discussing, prevention is a political and not a medical responsibility. Medical observers must be grateful for the painstaking work that has contributed to the understanding and management of radiation injury and hope that the important gaps in our knowledge will soon be filled.

Current Comment.

DISSEMINATED SCLEROSIS.

THE almost simultaneous appearance of articles from England and America on the subject of disseminated sclerosis makes reference to that obscure malady opportune. Douglas McAlpine and Nigel Compston, writing from the department for nervous diseases of the Middlesex Hospital, London, have produced an important article which they entitle "Some Aspects of the Natural History of Disseminated Sclerosis".[1] From the other side of the Atlantic we have practically the whole of the May, 1952, number of *The American Journal of Medicine* devoted to a symposium on multiple sclerosis and demyelinating diseases with George A. Schumacher as guest editor. Multiple, disseminated or insular sclerosis, as it is variously known, is a disease whose causation is so obscure and whose course is so variable and tragic that a discussion about it will always attract attention. The descriptions that were given in the early years of this century of its symptomatology and pathology are little different from the accounts which appear today—in Allbutt and Rolleston's "System of Medicine" J. S. Risien Russell gave a description which needs little addition. Present-day clinicians will find an adequate account of the disease in Kinnier Wilson's text-book "Neurology". The condition is by no means rare. Kinnier Wilson states that in England it ranks high among nervous diseases, coming close to neurosyphilis, occurring in 160 persons per million of population. In Switzerland the incidence is more than twice that of Great Britain, and in 1903 Bramwell showed that the disease occurred at least three and a half times more frequently in Great Britain than in the United States. Of course the figures may be very different today. Schumacher in the foreword to the symposium that has been mentioned states that in 1946 a great wave of concentrated effort came from a group of laymen who in that year founded the National Multiple Sclerosis Society to finance research into the problem. Kinnier Wilson writes about the "central mystery of the disease", and it is to this that the two contributions under discussion are mainly directed.

Schumacher points out that certain epidemiological characteristics have been established in connexion with the disease and that these must be explained by any proposed theory of causation. He adds that data regarding the influence of emotional factors make this aspect of investigation one of the most important single advances in the understanding and management of patients—"yet it seems unlikely that the disease will turn out to be primarily a psychosomatic disorder". In regard to the demyelination he poses two questions—whether it is a specific common denominator relating the several central nervous system diseases in which it occurs, or whether it is a non-specific reaction of nervous tissue to injury consequent upon disruption of enzyme systems through various causes. McAlpine and Compston have reviewed the case reports of 840 sufferers from the condition seen since 1930. Six hundred and seventy-five patients have been traced and 475 reinterviewed; the course of the disease has been studied in detail in 414 cases. A special study was made of 250 patients, and in respect of these a control series of 250 was used. An hereditary factor was evident in about 6% of cases. The incidence of allergic disease was 27% in the disseminated sclerosis group and 16·8% in the control group. Of the 840 patients the onset occurred in the third decade in 35·3%, after the age of forty in 20·3%, and between the ages of ten and fourteen years in 1·4%. Factors which appeared to precipitate the onset or relapse in certain cases included trauma, infection, peripheral sepsis, and less frequently emotional stress. Pregnancy did not appear to be important. In a significant proportion of cases in which trauma or peripheral sepsis preceded the onset, the site of injury could be correlated with the site of lesion in the central nervous

[1] *The Quarterly Journal of Medicine*, April, 1952.

system. The results of a dietetic inquiry among fifty patients were negative.[1] In discussing the problem McAlpine and Compston remind readers that there are two factors in the development of any disease—the agent initiating the damage to tissue, and the pathological process thereby set in motion. They think that these two factors have not always been borne in mind in connexion with disseminated sclerosis. They draw attention to Lumsden's contention that in disseminated sclerosis demyelination is accompanied by cellular biochemical changes and that these changes are dependent on enzymic reactions. This does not mean that the primary cause of disseminated sclerosis is an enzymic defect, unless the defect is an inborn error in metabolism. Similarly theories of a vascular origin are theories of mechanism and not of ætiology. "The retention of the term 'sclerosis' as applied to this disease has tended to obscure the fact that primarily it is a form of encephalomyelitis, and that gliosis is a secondary process." McAlpine and Compston state that Lumsden put forth the hypothesis that in disseminated sclerosis two processes are at work—(*a*) a preparatory exogenous factor damaging the white matter, and (*b*) an endogenous mechanism which liberates a myelinolytic substance related to the myelin sheath or oligodendrocytes. McAlpine and Compston are concerned with the nature of the exogenous factor. They reject the possibility that this factor is a specific infective agent. One of the reasons for their so doing is the difficulty of correlating the presence of an infective agent with the characteristic relapsing and remitting course of the disease. They agree with Lumsden that if the real cause is a specific transmissible agent it must be a virus or a chemical substance not yet listed among known pathogenic agents, and one with some extremely uncommon properties. They believe that the disease may be explained on the basis of hypersensitivity. They try to support their view by referring to other forms of encephalomyelitis such as post-vaccinal and post-exanthematous forms and they quote other observers and their findings. In their group of 250 patients studied intensively and compared with 250 controls they found the increased incidence of accepted allergic diseases already mentioned; other aspects which they discuss include the nature of the precipitating and aggravating factors, the simultaneous activity of the disease and of allergic symptoms in certain cases, the variation in the mode of onset and the relapsing course of the disease.

When we turn to the American symposium we find a great deal to interest us. J. R. M. Innes and L. T. Kurland contribute an article: "Is Multiple Sclerosis Caused by a Virus?" They discuss clinical, pathological and experimental evidence and conclude that the virus hypothesis is still neither proved nor disproved and state that reinvestigation seems justified. They think that many of the investigations indicating the absence of infectivity are so limited as regards source of material, laboratory animal species and techniques used that conclusions from the data presented are not wholly admissible. They set out aspects that would require attention if reinvestigation was carried out. Two of these are (*a*) the need to include work on acute disseminated encephalitis, neuropticomyelitis and diffuse sclerosis, and (*b*) constant consideration of the possibility that, even if a virus was found, it might not evoke in animals a disease exactly like disseminated sclerosis. Hans H. Reese, who contributes to the symposium, states that statistical surveys of the disease give little if any support to an infectious theory for the formation of disseminated islands of demyelination and of gliosis with rather sharply defined contours. He thinks that the allergic theory must be further studied; he also refers to the views of Lumsden on the role and functional integrity of the oligodendroglial cells in disseminated sclerosis. Lumsden's contention that "the whole obscure problem of the demyelinating diseases may prove to be in the biology of the oligodendrocyte" also needs urgent study. He asks two rhetorical questions: (*a*) "What endogenous or exogenous factors alter the biology and cause regional malfunctions of the oligodendrocyte?" (*b*) "Why then the intermittency in the clinical course of multiple sclerosis?" E. Weston Hurst, writing from Manchester, England, contributes to the American symposium a paper on experimental demyelination. He states that the evidence that diseases like diffuse sclerosis and multiple sclerosis are allergic in origin depends very largely on the claim that histological changes characteristic of "hypergic reactions" are present at some time in some of the lesions. He adds that Jervis, Ferraro and Kopeloffs have shown that animals may become sensitized to products of breakdown of their own myelin, "so that in a chronic condition characterized by progressive or intermittent destruction of myelin a claim of this nature cannot carry the weight it would in a disease of abrupt onset and rapidly fatal course". After surveying the whole field of naturally occurring demyelinating diseases of man and animals, Hurst holds that it is quite inconceivable that there can be a common basis for all. The experimental evidence points to the many ways in which demyelination may be produced—"demyelination is merely the response of the white matter to noxious stimuli of a certain intensity".

One or two of the main features of the recent contributions to the literature of this subject have been mentioned, and these should stimulate the interest of clinicians in this obscure subject. Probings into the hidden mysteries of ætiology may not bring much comfort or help to the doctor who has to deal with an individual patient, but inquiry must go on—even by the isolated practitioner. If laymen in America can get together and finance a society to undertake research in a disease, those who treat patients suffering from it should try to learn all they can about it. The object of the present discussion has been to record certain points of view and to awaken interest.

[1] In *The New England Journal of Medicine* for May 8, 1952, Roy L. Swank *et alii* report observations made on disseminated sclerosis in rural Norway. They found a high incidence of the disease in farming and dairying areas. Their observations suggest that a high fat intake is to be found in the high incidence areas. Their study "seems to corroborate the hypothesis that the ingestion of fats—in particular milk and animal fats—may be among the factors that precipitate multiple sclerosis in susceptible persons. They state that their information does not disprove the possibility that the consumption of these fats may be coincidental with other factors having the same distribution.

THE STAY OF AGED SICK IN HOSPITAL.

ELDERLY PEOPLE find it more difficult to obtain admission to hospital than younger patients because of the prevailing idea that once they gain admission they occupy beds for a long time. An interesting report on this question comes from University College Hospital, London, and is made by Lord Amakee, P. Arnold and A. Polak.[1] University College Hospital has a unit of 120 beds for the care of the aged sick. It also has a further 30 beds in a hostel. It has 77 long-stay patients, 23 of whom are in the hostel. The authors' observations concern 340 patients (180 men and 160 women) admitted during the year July 1, 1950, to June 30, 1951. Of this total, 40 or 11·8% remained in hospital for more than six months and are regarded as long-stay patients. The average stay of the remaining 300 patients was 40·2 days. The average length of stay of adult patients admitted to the medical wards of University College Hospital during the year 1950 was 35·1 days. When those with tuberculosis and skin disease were excluded the average length of stay was reduced to 32·6 days. The authors point out that they did not confine their patients for admission to those whose prognosis seemed relatively good; even those with obviously terminal diseases were not rejected. The number of deaths, most of which occurred within a month of the patient's admission, was high—105 or 30·9%. The authors do not know how long the patients who remained in hospital for over six months are likely to stay. The conclusion is that the stay in hospital of the great majority of elderly sick was not much longer than that of the younger medical patients.

[1] *The Lancet*, July 26, 1952.

Abstracts from Medical Literature.

GYNÆCOLOGY AND OBSTETRICS.

Studies in Rh Sensitization.

ALEXANDER S. WIENER, RAFFAELE NAPPI AND EVE B. GORDON (*American Journal of Obstetrics and Gynecology*, January, 1952) stress the importance of the maternal Rh antibody titre as a criterion of severity of erythroblastosis in the baby. Five hundred and forty-eight Rh-negative women were tested for antibodies; 338 were not sensitized, and in this group only two babies were affected and these from A and B sensitization. Of the 211 babies from sensitized Rh-negative mothers, 23 were Rh-negative and 188 were Rh-positive. None of the Rh-negative babies were erythroblastotic, whilst about 90% of the Rh-positive were affected. The mortality rate among affected babies was closely related with the height of the titre of the maternal Rh antibodies antenatally. With titres of four units or less determined by the albumin-plasma method, the total mortality rate was 12·2%, whilst with titres up to 256 units the rate was as high as 72·2%. The authors suggest that the facts that occasionally a baby may be only mildly affected with a high titre, and conversely an erythroblastotic baby may die even though the titre is low, indicate that the babies' resistance to the antibodies also plays a role in the prognosis.

Urethral Diverticulum in the Female.

CARY P. GRAY (*The Western Journal of Surgery, Obstetrics and Gynecology*, February, 1952) states that female urethral diverticulum is a most troublesome and not too uncommon condition affecting the female urethra. Two types are described—the congenital, arising from the faulty union of primitive folds or cysts in the paraurethral ducts or glands, and the acquired, resulting from infection or abscess formation in these glands, traumatic instrumentation of the urethra or extraurethral trauma during intercourse or childbirth. They usually occur on the vaginal side of the urethra, and the majority occur in the posterior or middle third. At times a urethrovaginal fistula may occur if the diverticulum has ruptured. The symptoms and signs are usually those of chronic recurrent cystitis; a vaginal mass may be present which is tender, soft and doughy, or if containing calculi, indurated, and from it pus, urine or blood may be expressed. The opening of the diverticulum may be demonstrated by cysto-urethroscopic examination. The most satisfactory and permanent treatment is excision of the sac, with closure of the urethral opening and the wound in layers.

Hodgkin's Disease and Pregnancy.

H. L. STEWART AND R. W. MONTO (*American Journal of Obstetrics and Gynecology*, March, 1952) review the literature on Hodgkin's disease and pregnancy, and report three cases of their own. They state that in all, 109 women with 134 pregnancies have been reported as suffering from this combination. Their conclusions from an analysis of these cases are that (i) the woman with Hodgkin's disease is not necessarily infertile, (ii) pregnancy complicating Hodgkin's disease is not an indication for therapeutic termination, (iii) the majority of women with Hodgkin's disease do well during pregnancy, parturition and the puerperium, (iv) Hodgkin's disease is unaffected by the pregnancy, either favourably or unfavourably, and (v) there is only one case in the literature of intrauterine transfer of Hodgkin's disease from mother to baby.

Rh Hapten Therapy in Erythroblastosis.

R. W. MARSTERS, R. T. F. SCHMIDT AND MARION E. BLACK (*American Journal of Obstetrics and Gynecology*, March, 1952) report their results in the treatment of 13 immunized pregnant Rh-negative patients with weekly injections of 100 to 300 milligrammes of an Rh hapten preparation. They state that no significant change occurred in the apparent concentration of circulating antibody. In only two out of the eight patients treated with Rh hapten and delivered could beneficial results possibly be ascribed to the administration of this particular hapten under the dose regimen employed.

Post-Hæmorrhagic Shock in the Newborn.

GEORGE Z. WICKSTER (*American Journal of Obstetrics and Gynecology*, March, 1952) draws attention to the role of severe anæmia due to blood loss as an important factor in the death of the newborn. He states that the immediate cause of such anæmia and shock may be *placenta prævia, abruptio placentæ, vasa prævia,* rupture of a marginal sinus due to a short cord, incision into the placenta at Cæsarean section, and unapparent hæmorrhage into the maternal circulation from the fœtal surface of the placenta. In the severe cases of post-hæmorrhagic shock, immediate transfusion is necessary and antishock measures should be instituted, including oxygen; 10 millilitres per pound body weight of suitable blood should be given. Every infant born in association with *placenta prævia, abruptio placentæ* or abnormal placenta should have an adequate hæmatological follow-up.

Post-Operative Unsuspected Cervical Carcinoma.

WILLIAM F. FINN (*American Journal of Obstetrics and Gynecology*, April, 1952) discusses early asymptomatic carcinomata which were not recognized clinically, but were first diagnosed after hysterectomy had been performed. He states that in all 21 patients have been discovered to have unsuspected carcinoma of the cervix during the past five years at the New York Hospital; 19 of the carcinomata were squamous, nine were Stage 0 and 10 were Stage 1, while two were adenocarcinomata. The usual pre-operative diagnosis was myoma or prolapse. Approximately 1% of all hysterectomies resulted in discovery of undiagnosed cervical carcinoma; 16 patients were asymptomatic and had no physical signs, while five deserved further preliminary diagnosis because of erosion, contact bleeding or post-menopausal bleeding. Nine of the cancers were in the endocervix and ten at the squamo-columnar junction, whilst only two were on the exocervix. Multiple biopsies at the squamo-columnar junction, aspiration smears and/or curettage of the endocervix would have detected these cancers. In respect of treatment for these cancers, the author states that although the cancer may have been completely removed by hysterectomy, the patient should be given every additional safeguard, which at the present time is irradiation. Nine of the patients with Stage 0 cancer received irradiation, as did one-half of the patients with Stage 1 and both the patients with adenocarcinoma. All patients are living and without evidence of recurrence, 14 having been observed for two years.

Carcinoma of the Cervix Complicating Pregnancy.

A. P. HUDGINS (*Western Journal of Surgery, Obstetrics and Gynecology*, March, 1952) discusses carcinoma of the cervix complicating pregnancy. He states that the early symptoms, watery discharge and repeated "spotting" or bleeding, are usually considered, during pregnancy, to be due to an abnormally placed placenta or threatened miscarriage, a polypus, ulceration or erosion of the cervix. Moreover, the normal appearance of the cervix in pregnancy may be misleading. A definitely outlined, circumscribed ulcer of the cervix which bleeds easily on contact, with an unusual firmness or leathery feeling, justifies biopsy. A note should be made, informing the pathologist that the patient is pregnant, as the epithelial reaction in pregnancy may resemble, at times, malignant change. The frequency in pregnancy varies from one in 2000 cases to one in 15,000, and at the Mayo Clinic pregnancy was found, as an incidental finding, in 0·7% of the total number of cases of carcinoma of the cervix. The carcinoma has usually begun before the onset of the pregnancy, and one author states that these patients are normally susceptible to pregnancy. Treatment depends on the extent to which the carcinoma has extended, and the duration of the pregnancy. In the first three months the welfare of the mother must be considered first, and treatment be instituted as if she was not pregnant. If the patient is met with in the second trimester, radium should be applied in an effort to bring the pregnancy to the stage of viability, delivery being effected by Cæsarean section. The carcinoma is then treated intensively by irradiation or radical surgery or both. If the child is viable at the time of discovery of the condition, delivery may be accomplished immediately, preferably by Cæsarean section, to avoid vaginal trauma. There is some difference of opinion on whether radium should be applied before or after the delivery of the child. Applied before delivery, it minimizes the bad effects from trauma and manipulation. After delivery of the child, intensive irradiation or radical surgery is completed. The fœtus may be affected by the malignant condition in the following ways: (i) by maternal inanition from the malignant growth; (ii) by hæmorrhage and secondary infection from the neoplasm; (iii) by failure to carry through to viability; (iv) by

tendency to low placental implantation; (v) by delivery problems of a firm or friable cervix. The maternal outlook is generally considered to be poor, as the malignant condition is not generally recognized early. Recent studies do not substantiate the observation that pregnancy associated with carcinoma of the cervix serves to hasten the progress of the disease.

Vesico-Vaginal Fistula following Abdominal Total Hysterectomy.

HENRY C. FALK AND IRVING A. BUNKIN (*Surgery, Gynecology and Obstetrics*, October, 1951) report the results of operative treatment in nine cases of vesico-vaginal fistula following abdominal total hysterectomy. Although several of these patients had been submitted to previous operations for the cure of the fistula, the results were uniformly successful in the nine cases; the Latzko partial high colpocleisis technique was employed. The technique is described and illustrated in detail, and the pre-operative and post-operative treatment is given. The authors state that certain important principles in the operation of abdominal total hysterectomy are essential if fistulæ are to be avoided. They stress the importance of securing the proper plane of cleavage between bladder and anterior vaginal wall and the adequate displacement of the bladder downward out of danger. Also the vagina is entered posteriorly and should be severed close to its attachment to the cervix. According to the authors the pathological anatomy of these fistulæ follows a characteristic pattern. They are always at the vault of the vagina and on the anterior wall. The transverse scar in the vault forms the posterior margin of the fistula. Mention is made of the Trendelenburg transvesical approach and the Von Dittel transperitoneal approach, which have been used in the treatment of these fistulæ. The Latzko operation of partial colpocleisis denudes the vaginal wall around the fistula, and the denuded posterior vaginal wall is used as a flap to cover the opening in the bladder. The authors state that diverticulum of the bladder does not form after this operation, the vesical edges do not require denuding, nor does the bladder wall require suture. They consider that repair of a post-operative vesico-vaginal fistula should not be attempted until at least three months after the operation which caused it or after a previous attempt at closure. Investigation of the urinary tract by cystoscopy, excretory urography and pathological examination of the urine is necessary before operation. The exact location of the fistula in relation to the ureteral orifices should be known prior to operation, and appropriate chemotherapeutic and antibiotic agents are given pre-operatively and post-operatively to ensure a clear urine. The following are important points in the technique of operation described. The operation is performed with the patient in the lithotomy position; good light, suitable retraction and adequate access to the fistula by the use of episiotomy or Schuchardt incision are required. The vaginal vault around the fistula is mobilized by four silk traction sutures, and the vaginal mucosa is denuded in four quadrants around the fistulous opening. The edges of the fistula are not freshened and are not sutured to each other. Closure is by a flap of the denuded posterior vaginal wall and not by suture of the fistula. Three layers of fine chromicized sutures coapt the raw denuded surfaces of the anterior and posterior vaginal walls and finally the vaginal mucosa. Interrupted sutures are used and are placed from above downward and not from side to side. Post-operative care includes catheter drainage of the bladder for twenty-four hours, followed by catheterization at intervals of two hours, the time between catheterizations being gradually increased. Appropriate chemotherapeutic and antibiotic agents are given. Patients are allowed out of bed after twenty-four hours and are usually discharged from hospital after nine to ten days. The authors state that this operation is successful even in cases in which the patients have been submitted to previous operation for the cure of fistula. In their hands it has no inherent mortality rate and is safe, easily performed and not associated with undue shock or hæmorrhage.

Pelvic Exenteration for Extensive Irradiation Necrosis.

ALEXANDER BRUNSCHWIG (*Surgery, Gynecology and Obstetrics*, October, 1951) reports results following pelvic exenteration in 10 patients suffering from extensive irradiation necrosis of the pelvic viscera following radiation therapy for carcinoma of the *cervix uteri*. This series occurred among a total of 135 operations of pelvic exenteration performed for advanced pelvic cancer, the primary growth being usually in the cervix. However, in these 10 cases there was no evidence of residual cancer in the excised pelvic organs but extensive irradiation necrosis. The condition of these patients was such that if operation had not been performed they would have died from complications of the extensive pelvic necrosis. All had had proven carcinoma of the cervix in the first instance; they had received radiation therapy; their clinical condition was deteriorating; they had the clinical findings of "frozen pelvis", and their pain and discomfort were of a degree to make them accept readily such an operation. Partial pelvic exenteration is defined by the author as excision of the bladder, vagina, uterus and adnexa, and implantation of the ureters into the colon. Complete pelvic exenteration consists of removal of all the pelvic viscera including the sigmoid colon and rectum with implantation of the ureters in the colon above the colostomy. This results in a "wet colostomy", which is managed satisfactorily by the use of a Pierce bag. The complete operation was performed on eight patients, and two patients had partial pelvic exenteration. Four patients died as a result of the operation, but the remainder did extremely well, were free from pain, gained weight and resumed their normal activities. The author states that this mortality rate is double that in the larger series of operations performed for extensive active malignant disease. He considers that extensive irradiation causes changes in the tissues which make them less able to stand the stresses and strains of operation. He goes on to state that this procedure represents an ultraradical attack on extensive irradiation injuries of the pelvic viscera. It is a desexualizing operation with psychological aspects which cannot be disregarded, especially in a group of patients who have no residual cancer and whose expectation of life is greater than that of patients with advanced cancer. The necessity for such operations as this for extensive irradiation necrosis is the result either of the injudicious use of irradiation, or of hypersensitivity of the tissues to irradiation, or both. Radiation therapy should be carried out with all due precautions, and once an adequate course of therapy has been given and the disease is not controlled, repetition of irradiation should be avoided, and radical surgery should be employed if possible.

Mistakes in Interpretations of Intraepithelial Carcinoma.

EDMUND R. NOVAK AND GERALD A. GALVIN (*American Journal of Obstetrics and Gynecology*, November, 1951) report 25 cases in which a diagnosis of intraepithelial carcinoma of the *cervix uteri* was made by pre-operative biopsy but not confirmed by laparotomy. The sources of error in these mistakenly diagnosed cases have been studied and analysed. The authors state that the histological entity of intraepithelial carcinoma has been so generally accepted that one may fail to appreciate the fact that microscopical identification of intraepithelial carcinoma is an exacting task. Over the past nine years they have had 25 cases in which the histological examination of the removed cervix failed to confirm a diagnosis of intraepithelial carcinoma made on one or more pre-operative cervical biopsies. The source of error in these 25 cases has been due, chiefly, to misinterpretation of the microscopical findings. Removal of all the carcinoma by biopsy may have been the cause in two cases; technical errors due to failure to appraise properly certain artefacts of staining and misinterpretation of tangential sectioning of surface epithelium accounted for six diagnostic errors. The incorrect evaluation of "basal-cell hyperactivity" caused mistaken diagnosis and unnecessary surgical treatment in 14 patients. The authors are particularly impressed with the role that pregnancy and acute pelvic inflammatory disease might play in the production of this microscopic picture, and they feel that in the presence of either of these conditions one should be very hesitant to undertake any definite diagnosis concerning intraepithelial carcinoma. Misinterpretation of "epidermization" caused a mistaken diagnosis in seven cases of the series, and the authors consider that experience and great care are necessary in the discriminization of benign epidermization from intraepithelial carcinoma. The authors conclude that the cervical epithelium can no longer be regarded as static, but is highly susceptible to various influences, as yet poorly understood. They consider that in the present state of knowledge the diagnosis of cancer should be withheld until the entire thickness of the surface epithelium is replaced by cells possessing the characteristics of malignancy. Prolonged observation and repeated cervical biopsies do not, in their opinion, jeopardize the chance of cure. Where biopsies are repeatedly equivocal, sharp conization of the cervix and examination of a generous sample of tissue are recommended as a valuable diagnostic adjunct.

Special Articles for the Clinician.

(CONTRIBUTED BY REQUEST.)

XXXII.

THE SKIN AND SYSTEMIC DISORDERS.

Diseases of the Alimentary Canal.

ABSORPTION of toxic bodies by the alimentary tract is a common cause of urticaria, rosacea, eczema. Urticaria may be due to hyperacidity or to hypoacidity or to anacidity. Ehrmann stressed the significance of secretory anomalies, particularly in neurodermatitis and pruritus, in which an absence or lowering of gastric acidity was found. The administration of dilute hydrochloric acid is worth a trial but is not always successful. On the other hand, gastric disturbance may be due to skin disease. Skin disease may be due to alimentary infections and alimentary intoxications. So skin eruptions may occur after food poisoning, due to the toxic effect of an alkaloid, for example from mushrooms or as a result of contamination with bacteria which produce deleterious changes in the food itself. The eruptions ensuing take the form of urticaria or toxic erythema. Dermatoses may be due to diseases and dysfunction of the gastro-intestinal tract and may result from (*a*) the toxic action on the part of an ingested food, (*b*) the allergenic action of food, (*c*) anatomical disease of the digestive system, (*d*) the action of toxins formed by pathological bacterial flora, (*e*) excessive absorption of skatole. Hypoacidity of the stomach may cause urticaria, dermatitis, rosacea and acne, so that some of these conditions are relieved by the administration of dilute hydrochloric acid. Deficiency of hydrochloric acid plays a prominent part in the creation of food allergies. Incompletely digested proteins can reach the blood stream through gastric and duodenal ulcers and thus allergize the organism. Conversely gastro-intestinal ulcerations may follow skin burns and the subsequent resorption of proteolytic products resulting from severe cutaneous skin damage. According to the Vosses, acute generalized dermatoses are regularly associated with hyperacidity and chronic conditions of the skin with hypoacidity. They explain the hyperacidity associated with acute inflammation of the skin as a consequence of a sudden increase in histamine. Diseases of the small intestine, such as chronic enteritis, cause absorption of toxins leading to skin manifestations. Fermentation and putrefaction and constipation in the large intestine are the principal factors in the production of intestinal toxins. *"Dermatitis colonica"* is a rather indefinite eruption, similar to parapsoriasis. The borders of the patches show fairly discrete red macules. The disease is sometimes associated with a predominance of varieties of streptococcus. The condition may yield to intestinal antiseptics. Intestinal pathological flora are capable of producing porphyrins which can promote light sensitization. Pathological intestinal microorganisms may reach the skin via the blood and lymph channels and cause abscess formation. In dermatoses caused by diseases of the rectum, the perianal itching and dermatitis are the result of constant irritation from the intestinal secretion. Rectal fistula often causes perianal dermatitis.

Dermatoses due to Diseases of the Liver and Pancreas.

Under normal conditions the liver is capable of intercepting nutritive allergens and of making them harmless so that there can be no antigen-antibody reaction. However, in the event of hepatic insufficiency or an overwhelming invasion of the liver by massive quantities of antigen, the liver is unable to deal with the situation, whereupon antigen-antibody reactions in the form of allergic dermatoses appear. Icterus may be followed by erythema, urticaria, prurigenous dermatoses, purpuric eruptions, pigmentation and pruritus. Cholecystitis may be the sole cause of certain skin diseases, for example, urticaria and dermatitis, as evidenced by their disappearance after cholecystectomy. Cirrhosis of the liver may cause cutaneous manifestations such as pruritus through the disturbance of protein metabolism. Liver disturbance leads to the formation of porphyrias, which in turn tend to allergize the skin to sunlight.

A patient with undiagnosed diabetes may occasionally present himself on account of a skin disorder. Itching is a frequent complaint of diabetics and does not necessarily vary with the degree of hyperglycæmia. Twenty-five *per centum* of patients with *diabetes mellitus* have diseases of the skin, in particular furuncles, carbuncles, epidermophytosis, eczema, balanitis or vaginitis or *xanthoma palpebrarum*. They have a tendency to develop intertriginous moniliasis under the breasts, in the navel, axillæ, and natal cleft. Eczematous eruptions around or near the mouth, eyes, nose, anus or vulva demand an examination of the urine for sugar. True diabetic xanthomata, such as are seen in association with diabetes, disappear when the underlying cause is eliminated.

Lipoid Diseases of the Skin. Cutaneous lipoid diseases are caused by disturbance of the lipoid metabolism which leads to a flooding of the organism with the various types of lipoids. Excessive storage of the latter in the skin gives rise to a number of dermatoses. The most commonly encountered form is a xanthoma or xantheloma which is a result of a general or local disorder of the cholesterol metabolism. Xanthoma is a disturbance of lipoid metabolism resulting in the deposit of oily substances in and between the cell tissues, including those of the skin. There are two types of cutaneous involvement.

Xanthoma disseminatum is characterized by lesions predominantly on the flexor surfaces and also the mucous membranes, including those of the mouth, pharynx and larynx. The blood lipoid levels are within normal range and there is a frequent association with *diabetes insipidus*. In treatment a diet with a low fat content and especially a low cholesterol content is indicated and beneficial. Insulin has been recommended in diabetic xantheloma and other forms of xanthelasma.

In non-diabetic xanthelasma insulin is given in combination with a diet with a low fat and low cholesterol content without restriction of carbohydrate. To begin with, 5 to 10 units of insulin are administered daily. If tolerated, this may be increased to 15 units three times a day. In some patients with xanthelasma the vitamin *A* level in the blood serum is increased to 150 units per 10 millilitres, as compared with the normal 14. In these cases the liver is unable to transform carotene into vitamin *A* and store the latter, and the organism becomes flooded with vitamin *A*. This in turn promotes excessive production of fatty bodies, particularly of phospholipid substances, the accumulation of which leads to the formation of xanthelasma. The following therapy, according to Urbach, should be tried. Exclude the following vegetables: spinach, carrots, red pepper, tomatoes, peas, lettuce; the following fruits: apricots, mangoes, prunes; daily dishes, for example, butter, cream, cheese, eggs, dried whole milk, beef, liver, kidney and oysters. Lecithin, for its lipotropic effect, can be tried with an animal and vegetable diet. The dose of lecithin is 50 grammes.

The Reticulo-Endothelial System.

If papules or nodules occurring in the skin cannot readily be diagnosed, it is wise to do a biopsy and make an examination of the blood. A greenish pallor is seen in young women with anæmia due to a deficiency of iron. Coffee-brown patches occurring on the forearms and dorsum of the hands are sometimes seen in pernicious anæmia. Plum-coloured nodules appearing in the skin may be an important feature in leuchæmia. This neoplastic anæmia may in the beginning be associated with a normal blood picture and only later produce a leuchæmic picture.

Leuchæmia, particularly the monocytic and lymphatic varieties, may be associated first with localized erythema and pruritus and later with generalized exfoliative erythroderma. Similarly, local and later generalized pruritus may be a very early manifestation of leuchæmia. A patient with hypochromic anæmia, with perhaps dysphagia or Plummer-Vinson syndrome, may first present with dermatitis and fissuring around the angle of the mouth. This has to be distinguished from leakage of saliva from an ill-fitting denture, or sensitivity to toothpaste or lipstick. With hypochromic anæmia the tongue may be reddened and excoriated and the nails may be brittle, painful and shaped like a spoon with round edges and central depression. Intractable pruritus, particularly of the shins, may be an early feature of Hodgkin's disease and may precede lymphadenopathy by two years and possibly be associated with a high blood sugar content.

Disease of the Kidneys.

Œdema of the eyelids, with œdema elsewhere, may be an early feature of renal failure or Bright's disease. Skin disorders are present in 20% of patients who suffer from all forms of nephritis.

Endocrine System.

In Cushing's syndrome patients often attend for the treatment of freckles, moles, telangiectasis and hirsuties. If in addition there is a full-moon face, obesity, marked *striæ distensiæ*, beard development in females, and tender deposits of fat near the face, neck and trunk but not near the limbs, one should think of Cushing's syndrome, due to basophile

adenoma. Excessive sweating may be associated with hyperthyroidism, as also may vitiligo. In the aged who complain of feeling cold and their skin is pale yellow, dry and coarse, hypothyroidism should be borne in mind. In hypothyroidism there are sometimes painful cracks and fissures in the palms and soles, due to the effect of diminished sweating and a tendency to hyperkeratosis. In hypothyroidism the hair is dry and lustreless and may fall in a patchy fashion. In Addison's disease there is widespread pigmentation asthenia with low blood pressure. Hyperpigmentation of exposed areas, especially the knuckles, is an early feature; later all areas subject to pressure, friction and irritation become darker, while the skin round the mouth escapes.

Ovarian dysfunction at the climacteric leads to increased tendency to cutaneous sensitization. Tags and papules develop on the skin of the neck and in a small number of cases keratoses appear on the palms and soles.

Diseases of the Circulation.

Disorders of the skin are indirectly influenced by circulatory changes. Chronic congestive failure leading to œdema of the ankles and stretching of the skin may cause so-called gravitational eczema or prevent an eczematous condition from responding to treatment. Rosacea which fails to respond to the usual local therapy may be aggravated by heart disease. Varicose veins may be the cause of eczema of the legs. Crops of nodules which are tender or painful, purple or red in colour, occurring on forearms, chest and abdomen in association with fever, may be the first sign of *periarteritis nodosa*.

Diseases of the Lungs.

Asthma may alternate with eczema. Tuberculous infection of the lung may be associated with *lupus vulgaris, erythema nodosum,* Bazin's disease, rosaceous tuberculides or papular necrotic tuberculides of the arms and legs. Sarcoidosis involving the lungs may also be associated with sarcoids in the skin. The nails on the drum-stick fingers occurring in some chronic pulmonary diseases may be twice the normal size and curved longitudinally as well as from side to side.

Diseases of the Nervous System.

Psychosomatic disorders may be associated with the development of *dermatitis artefacta* in which the lesions are of a bizarre nature and atypical distribution. In multiple neurofibromatosis, also called von Recklinghausen's disease, skin lesions occur in three varieties. The disease may begin as a café-au-lait spot or be associated with freckling or general hyperpigmentation. This type (*forme fruste*) may persist without tumour formation, but usually multiple neurofibromata develop in the skin or along the course of the peripheral nerves. The lesions may be nodular or plexiform or sessile, the latter showing invagination on palpation. The third type of cutaneous involvement consists of localized sizeable molluscum growths which are frequently pendulous.

In syringomyelia bullæ and trophic ulcerations occur on the fingers and hands, and alternately there are contractures and gangrene. The disease causes weakness, hyperhidrosis and sensory disturbances, especially in the thumb and the index and middle fingers.

The eruption of *herpes zoster* follows a nerve distribution, but the lesion is not in the peripheral nerves. It is in the ganglia on the posterior nerve roots of the spinal nerves and the ganglia of the cranial nerves. The affected limb in poliomyelitis may show acrocyanosis and chilblains in the winter. Perforating ulcer of the foot can occur with peripheral neuritis.

FRANCIS C. THOMPSON,
Sydney.

British Medical Association News.

ANNUAL MEETING.

THE annual meeting of the South Australian Branch of the British Medical Association was held at the Verco Theatre, Institute of Medical and Veterinary Science, Adelaide, on June 25, 1952, DR. R. L. THOROLD GRANT, the President, in the chair.

ANNUAL REPORT OF THE COUNCIL.

The annual report of the Council was received and adopted on the motion of Dr. G. H. Burnell, seconded by Dr. D. R. Wallman. The annual report is as follows.

At the annual general meeting of the Branch, held on June 27, 1951, the following officers and members of Council were elected:

President: Dr. R. L. Thorold Grant.
Vice-President: Dr. B. S. Hanson.
Honorary Treasurer: Dr. F. L. Wall.
Honorary Medical Secretary: Dr. R. C. Angove.
Ordinary Members of Council: Group A, Dr. J. D. Fotheringham, Dr. H. A. Goode, Dr. A. C. McEachern and Dr. R. H. von der Borch; Group B, Dr. G. Viner Smith and Dr. A. G. Rowe.

At the first Council meeting of the new year, held on July 5, 1951, lots were drawn as to the two members (one each from Groups A and B) who would retire on June 30, 1952, instead of completing the usual two-year term of office, as a result of which it was determined that Dr. A. C. McEachern (Group A) and Dr. Viner Smith (Group B) would hold office for one year only.

At the Council meeting referred to above, the following subcommittees for the ensuing year were appointed:

Scientific: Dr. H. A. Goode and Dr. A. C. McEachern.
Contract Practice: Dr. C. O. F. Rieger, Dr. L. R. Mallen, Dr. G. L. Bennett, Dr. J. D. Fotheringham and Dr. H. A. Goode.
Ethics: Dr. C. O. F. Rieger, Dr. F. L. Wall, Dr. B. S. Hanson, Dr. A. C. McEachern and Dr. J. D. Fotheringham.
Parliamentary Bills: Dr. L. R. Mallen and Dr. C. O. F. Rieger.
Publicity: Dr. G. L. Bennett, Dr. J. M. Pedler and Dr. L. R. Mallen.
Library: Dr. R. H. von der Borch, Dr. A. C. McEachern and Dr. J. M. Dwyer.
Salaries: Dr. L. R. Mallen, Dr. C. O. F. Rieger and Dr. G. L. Bennett.
Tuberculosis Standing Committee: Dr. D. R. W. Cowan, Dr. J. L. Hayward, Dr. K. S. Hetzel, Dr. H. D. Sutherland, Dr. J. G. Sleeman and Dr. P. S. Woodruff.
Medico-Pharmaceutical Liaison Committee: Dr. R. L. Thorold Grant, Dr. H. A. Goode, Dr. R. C. Angove and Dr. C. O. F. Rieger.
Editorial Committee (Handbook): Dr. Thorold Grant, Dr. C. O. F. Rieger, Dr. B. S. Hanson, Dr. E. F. Gartrell, Dr. L. R. Mallen and Dr. R. C. Angove.

The president, immediate past president (if any), the vice-president, or vice-presidents, the honorary treasurer and the honorary medical secretary are *ex-officio* members of all committees, other than the ethics and standing committees.

The president and honorary medical secretary are members of the ethics, and of all standing committees.

ATTENDANCES AT COUNCIL AND COMMITTEE MEETINGS.

	Council.	Ethics.	Scientific.	Contract Practice.	Library.
Angove, R. C.	10	4	3	—	—
Bennett, G. L.	10	—	—	2	—
Fotheringham, J. D. ..	11	4	—	2	—
Goode, H. A.	11	—	2	1	—
Grant, R. L. Thorold ..	12	4	3	2	—
Hanson, B. S.	11	2	1	2	—
Mallen, L. R.[1]	5	—	—	—	—
McEachern, A. C.	12	4	3	—	2
Pedler, J. M. ..	9	—	—	—	—
Rieger, C. O. F.	12	4	3	2	—
Rowe, A. G. ..	10	—	—	—	—
Smith, G. Viner	10	—	—	—	—
von der Borch, R. H. ..	9	—	—	—	2
Wall, F. L. ..	12	4	3	2	—
Meetings held up to May 14, 1952	12	4	3	2	3

[1] Abroad until December 31, 1951.

Dr. J. M. Dwyer also attended the three meetings of the Library Committee as one of the representatives of the Council.

Monthly Scientific Meetings.

Nine scientific meetings have been held up to June 19, 1952, the following programme being carried out:

1951. July 26: Lecture by Dr. J. R. Barbour, "Low Back Pain and Sciatica." September 27: Clinical meeting at Adelaide Children's Hospital. October 25: Lecture by Dr.

P. S. Woodruff entitled "Tuberculosis and the General Practitioner". November 29: Paper by Professor J. B. Cleland entitled "Convict Doctors and Medical Explorers".

1952. February 28: Paper by Dr. H. McI. Birch entitled "Psychiatric Disorders in General Practice". March 27: "Medical Education." Introduced by Dr. V. D. Plueckhahn. April 24: Listerian Oration delivered by Sir Macfarlane Burnet. May 15: Lecture by Dr. John Mayo entitled "Recent Radiotherapeutic Advances". At this meeting Dr. J. M. Dwyer addressed members on the subject of the recent "Call" to the nation. June 19: Clinical meeting at Repatriation General Hospital, Springbank.

In addition to the above a joint meeting between representatives of the medical and pharmaceutical professions was held on October 18, 1951, which it is considered was of mutual advantage to members of both professions. This is the first occasion on which a joint meeting has been held in this State and the attendance was gratifying.

Members were also invited by The Royal Australasian College of Physicians to the lectures given by Professor D. M. Dunlop in August, 1951; and to a meeting of the State Branch of the Australasian Association of Psychiatrists, held at the Parkside Mental Hospital on November 20, 1951; also by the State Committee of the Royal Australasian College of Surgeons to attend a lecture given by Mr. F. J. Clark, of Perth, on May 23, 1952.

Membership.

The membership of the Branch is now 675, and the number of student associate members 58.

It is with sincere regret that the Council records the deaths of Dr. W. C. T. Chambers, Dr. C. E. C. Wilson, Dr. J. E. M. Storey, Dr. P. W. Rice and Dr. W. A. Hunter.

Representations on Boards et cetera.

Medical Board of South Australia: Dr. E. Britten Jones (Chairman).

Dental Board of South Australia: Dr. W. John Close.

Flying Doctor Service of Australia (South Australian Section): Dr. J. M. Dwyer (President).

Federal Council of the British Medical Association in Australia: Dr. L. R. Mallen and Dr. C. O. F. Rieger.

Saint John Ambulance Association: Dr. H. H. Hurst.

Representative of "The Medical Journal of Australia": Dr. W. M. Irwin.

British Medical Hall Company, Limited: Dr. C. O. F. Rieger and Dr. F. L. Wall.

Mothers and Babies' Health Association: Dr. R. N. C. Bickford.

Certifying Medical Practitioner under Part IX of the Workmen's Compensation Act: Dr. M. Erichsen and Dr. C. H. Schafer.

Advisory Council on Health and Medical Services: Dr. L. R. Mallen.

Nurses' Board of South Australia: Dr. G. H. Burnell.

University Post-Graduate Committee in Medicine: Dr. L. R. Mallen and Dr. J. E. Hughes, and the President *ex-officio*.

Representative on Central Council of the Association, London: Dr. Myles Formby.

Chiropody Board of South Australia: Dr. Neville P. Wilson.

Florence Nightingale Memorial Committee: Dr. Mary Burnell and Dr. J. Barbara Russell.

Branch representation on membership of the Australasian Medical Publishing Company, Limited: Sir Henry S. Newland, Dr. L. R. Mallen and Dr. C. O. F. Rieger.

World Medical Association: Dr. L. R. Mallen.

Representative at Annual Meeting of the Association (Dublin, July, 1952): Dr. Alan Britten Jones.

Sections.

Section of Anæsthetics.

Annual Report for 1951.—At the annual meeting held on January 31, 1951, the following officers were elected: President, Dr. Gilbert Brown; Vice-President, Dr. W. Wall; Secretary-Treasurer, Dr. J. E. Barker.

Visit of Professor Macintosh, of Oxford.—This was an event of outstanding importance to the anæsthetists of the State. Professor Macintosh gave an open lecture and film demonstrations on behalf of the Post-Graduate Committee on resuscitation and research. A dinner was held at Mount Osmond by the Section. This was most enjoyable, and so was the fireside talk which followed. A cocktail party was given by the president, Dr. A. D. Lamphee, and Mrs. Lamphee at their residence. The visit was a tremendous stimulus to all, and did much to show to other members of the profession the increasing importance of anæsthesia as a speciality.

In April a meeting was held to welcome Mr. H. Adams, of C.I., of Melbourne, when he demonstrated recent developments by the firm. A paper was also given by Dr. Burnell on recent views on Hirschsprung's disease.

At a meeting held in June the various articles and equipment carried by anæsthetists were discussed, and in October Professor Sir Stanton Hicks gave an interesting talk to members.

Several members attended a course of lectures in Melbourne in October for the Part II of the Melbourne Diploma of Anæsthesia, and in November they told members of various points which had impressed and interested them during the lectures.

At the annual meeting of the Section held on February 14, 1952, the following officers for the ensuing year were elected: Chairwoman, Dr. W. Wall; Vice-Chairman, Dr. J. E. Barker; Secretary-Treasurer, Dr. H. J. Ellis.

Section of Clinical Medicine.

The report of the Section of Clinical Medicine for the year states:

1. *Membership.*—There are thirty-five (35) financial members of the Section, which is again slightly less than last year.

2. *Officers.*—At the annual general meeting held on May 8, 1951, the following officers were elected: President, Dr. Ivan Magarey; Honorary Secretary and Treasurer, Dr. W. M. Irwin; Committee, Dr. Mark Bonnin, Dr. A. Kerr Grant and Dr. Colin Alderman.

3. *Clinical Meetings.*—Meetings were held in the Physiotherapy Department, Royal Adelaide Hospital, in May, July and November, 1951, and February, 1952. As mentioned in the last annual report, an attempt was made to hold the meetings on a regular night, *viz.*, the second Tuesday of the month. This was successful with three of the meetings, but the August meeting had to be brought forward to avoid clashing with other functions. August is a very crowded month for medical meetings. The average attendance was 29 members.

4. *British Medical Association Clinical Medical Prize.*—The prize for 1951 was won by Mr. D. A. Handley.

Eye, Ear, Nose and Throat Section.

At the annual general meeting held on March 20, 1951, the following officers were elected: Chairman, Dr. R. H. von der Borch; Vice-Chairman, Dr. D. O. Crompton; Committeeman, Dr. P. G. Jay; Secretary and Treasurer, Dr. R. N. Reilly.

Five general meetings were held throughout the year as follows:

May.—Three ophthalmological and two otological cases were presented and discussed, and arrangements put in hand for the programme for the remainder of the year.

June.—Two cases from each speciality were presented and discussed, and Dr. A. S. deB. Cocks gave an interesting and instructive paper on nerve deafness.

September.—Three ophthalmological cases were presented and discussed. Following suitable notice of motion from Dr. H. M. Jay, proposals for the dissolution of the Section and the formation of separate ophthalmological and ear, nose and throat sections were approved.

October.—This meeting was held in conjunction with the College of Radiologists (Aust. & N.Z.), South Australian Branch. Papers on "Conditions of the Eye and Eyelids Suitable for Radiation Therapy" were presented by Dr. B. S. Hanson, Dr. R. deG. Burnard, Dr. A. L. Tostevin and Dr. T. L. McLarty. The demonstration of a series of röntgenograms of oto-laryngological conditions completed an interesting and instructive evening.

November.—Mr. Arthur Lister, of London, and Dr. Hendrik Sjögren, of Sweden, honoured the Section by being present at the November meeting. Three cases of Sjögren's syndrome and one possible one were shown for Dr. Sjögren's opinion, and four other cases of ophthalmological interest and a case of carcinoma of the nose were also presented. Dr. Sjögren discussed the "sicca syndrome" in general and dealt with the points demonstrated by the cases shown. Mr. Lister

commented on the other eye cases and made suggestions as to ætiology and treatment.

December.—The final meeting was devoted to business relating to the dissolution of the Section and the formation of the new ones, as approval had been granted by the Branch Council for this to be done.

Since the above report came to hand the Section has now been divided so that there is now a Section of Ophthalmology, the office-bearers of which are: Chairman, Dr. D. O. Crompton; Vice-Chairman, Dr. S. Pearlman; Committeeman, Dr. T. L. McLarty; Secretary-Treasurer, Dr. M. C. Moore.

And for the newly formed Ear, Nose and Throat Section the office-bearers are: Chairman, Dr. R. McM. Glynn; Vice-Chairman, Dr. R. H. von der Borch; Committeeman, Dr. A. S. deB. Cocks; Secretary and Treasurer, Dr. R. N. Reilly.

Northern Medical Association.

Annual Report for Year Ended June 30, 1952.

Four meetings were held during the year.

The first was at Hamley Bridge in August, 1951, when the visiting lecturer, Professor D. M. Dunlop, spoke on "Aspects of Obstetrics and Gynæcology" to fourteen members and ten guests.

The second meeting was held at the Burra Hospital in October, 1951, when Dr. Noel Bonnin spoke on "Genito-Urinary Surgery", and nine members were present.

The third meeting was a post-graduate meeting held in the Clare Town Hall in March, 1952. The lecturers were: Dr. Ray Hone, "Recent Advances in Medicine"; Dr. Alan Lendon, "Some Aspects of Surgery"; Dr. Douglas McKay, "Pædiatrics". A quiz session followed, in which the questions were well answered by the lecturers. Sixteen members attended this meeting, and all were enthusiastic about the post-graduate course and grateful to all lecturers for coming such long distances to speak so ably to members.

The fourth meeting, held at Port Pirie Hospital in May, 1952, was a clinical meeting, where cases were shown by the following: Dr. Potter, (i) "Spastic Ileus with Multiple Intussusception", (ii) "Splenomegaly? Due to Chronic Malaria"; Dr. Hammill, (i) "Empyema following Fractured Rib and Presenting as an Abscess in Right Subcostal Region", (ii) "Case of Subarachnoid Hæmorrhage in a Young Man". Dr. Mallen spoke on prognosis and latest treatment. Dr. Rowe, "Supracondylar Fracture of Humerus in a Child with Involvement of Brachial Artery". Dr. Viner Smith, "Hypertensive Encephalopathy with a Background of Previous Lead Poisoning".

Then followed the annual general meeting, at which the following officers for the year 1952-1953 were elected: President, Dr. G. Wien Smith; Past President, Dr. L. R. Mallen; Honorary Secretary, Dr. A. C. Behrndt; Members of Committee, Dr. V. W. Potter and Dr. H. R. R. Hancock; Auditor, Dr. K. J. Basedow.

The finances improved considerably during the past financial year, owing to payment of due and outstanding annual subscriptions, there now being thirty-four financial members compared with ten at the time of the last annual report. The average attendance at meetings was twelve.

South-Eastern Medical Association.

The annual report of the South-Eastern Medical Association for the year 1951-1952 states:

Four meetings were held during the year, as follows:

July 21, 1951: Millicent. A clinical meeting was followed by dinner, after which Dr. D. O. Crompton gave an address on "The Eye in General Practice".

October 27, 1951: Mount Gambier. At the annual general meeting the following office-bearers were elected: President, Dr. R. J. Salts; Vice-President, Dr. H. K. Pavy; Honorary Secretary and Treasurer, Dr. J. S. Jeffries; Committee, Dr. J. H. Nicholls and Dr. R. R. Bowey. A clinical meeting followed, after which Dr. Kelvin Churches, of Melbourne, addressed the meeting on "Endocrines in Gynæcology".

January 19, 1952: Naracoorte. A film on "Aureomycin" was shown, followed by a public health discussion with Dr. Southwood and Dr. Hustler, of the Central Board of Health. In the evening Dr. Russell Barbour addressed the meeting on "Low Backache".

April 19, 1952: Mount Gambier. A clinical meeting was held, followed by dinner. Dr. E. B. Sims then addressed the meeting on "Recent Pædiatric Advances".

In addition a refresher course was held at Mount Gambier on May 11, 1952. The visiting lecturers were Dr. M. E. Chinner and Dr. J. R. Magarey.

The Association has been active in attempting to get a full-time health inspector appointed in the south-east.

There are twenty-four financial members of the Association and the average attendance at the meetings has been fifteen.

Upper Murray Medical Association.

Annual Report for Year Ending June 30, 1952.

There were four general meetings, three film evenings and a post-graduate week-end held in the twelve months.

June 12, 1951: Held at Renmark. Each member presented a case for discussion.

August 4 and 5: Dr. Ray Hone and Dr. D'Arcy Sutherland attended a post-graduate week-end as visiting lecturers. Their subject was "Disease of the Lung Excluding Tuberculosis", and was covered from both medical and surgical aspects respectively. It was profusely illustrated by lantern slides.

September 4: Film on aureomycin seen at Glossop High School.

October 2: Films on allergies and application of forceps, also shown at Glossop High School.

January 19, 1952: Held at Renmark. Annual general meeting. Office-bearers elected: President, Dr. T. T. M. Hayes; Vice-President, Dr. G. A. Hunter; Past President, Dr. R. K. Wilson; Honorary Secretary, Dr. T. G. Kohler.

March 4, 1952: Meeting held at Barmera, where Dr. Hayes gave a talk on "Recent Experiences in England".

March 24: Film evening held at Berri: (i) "Lower Segment Cæsarean Section", (ii) "Manual Removal of Placenta", (iii) "An Intussusception in Infants".

May 6: Held at Loxton. Paper by Dr. Hayes, "Latest Treatment of Burns in England". Case of Guillain-Barré syndrome presented by Dr. Auricht.

Over this twelve months there was an average attendance of six from a maximum of eight members.

Visit of Minister for Health.

On January 30, 1952, the Federal Minister for Health (Sir Earle Page) met members of the Council of the Branch and discussed with them the latest developments in regard to the provision of pharmaceutical benefits and the pensioner medical service. He indicated that his Government appreciated the opportunity that had been afforded him to meet and discuss the plans of his Government stage by stage with practising members of the profession throughout the States and stated that, in view of the fact that as both these schemes were devised by members of the profession, it was therefore up to them to make it work as smoothly as possible.

He dealt at some length on the rapidly mounting costs of the Government in supplying pharmaceutical benefits, and intimated that as many of the drugs were imported direct from America a large amount of dollar expenditure was thereby involved.

It was pointed out to the Minister by several members of the Council that a large economy in the costs of the scheme could be effected if he would permit doctors to deal direct with wholesale houses rather than through retail chemists. The Minister undertook to consider this aspect.

He also indicated that it would be of the utmost assistance to his Government if the profession in each State would appoint a disciplinary committee to inquire and report on cases of over-prescribing that may be brought before it by the Deputy Director of Health in the State concerned. The Minister was informed that as far as South Australia was concerned, such a committee as referred to above had been appointed over two years ago by the Branch Council at the Minister's suggestion, but that this committee had never been called upon to function. For this reason any delay in regard to the operation of disciplinary committees was not attributable to the medical profession.

At the conclusion of the conference the Minister expressed his appreciation of being given the opportunity of addressing members of the Council and intimated that the assistance that the medical profession had so willingly given to his Government at all times was very much appreciated.

Fees Payable to Medical Practitioners under Road Traffic Act.

During the year an amendment was made to the *Road Traffic Act*, whereby the fees payable to registered medical practitioners for rendering emergency treatment under

Section 17 (*g*) of the principal Act were increased from 12s. 6d. to £1 1s., *plus* travelling expenses, for each person attended. Members are reminded that the insurance company with which the vehicle concerned in the accident was insured is responsible for the fee of the medical practitioner, and such payment is made irrespective of who may be liable for the accident concerned.

Pensioner Medical Service.

The national health service (medical services to pensioners scheme) has now been in operation for sixteen months, and has undoubtedly been of service to the pensioners served.

The controls and forms, though necessary accompaniments of any scheme involving the expenditure of public money, have been irritating to participating members, and appear more complicated than is absolutely necessary. Despite this, however, those participating, who number 416 in this State, are reasonably satisfied with the conditions of service. With regard to the fees payable, however, there is dissatisfaction.

It will be remembered that the original fees of 6s. and 7s. 6d. respectively were agreed on in May, 1950, though the scheme did not commence until February, 1951. An increase to 8s. and 10s. became operative from July 1, 1951, this increment representing the appropriate amount when computed in accordance with the variation in the basic wage, the method agreed on at the start of the scheme.

Since then, efforts to increase the fees payable have been unsuccessful, and the formula for varying the fees in accordance with movement of the basic wage has been pronounced by the Minister for Health to be "quite unacceptable", and no other acceptable formula can be found.

In March the Federal Council therefore communicated with the Minister for Health and requested that the fees payable as from January 1, 1952, be 10s. 6d. for each surgery consultation and 12s. 6d. for each domiciliary visit. The Minister in his reply submitted that a case had not been made out for such an increase, and this letter was referred to the Branches. This correspondence was submitted to a meeting of participating practitioners of the Branch, held on May 8 last, when the following resolution was adopted:

> This meeting views with disfavour and consternation the repeated failure of the Minister to implement some plan for regular and automatic adjustment of the fee for service in the pensioner medical scheme in relation to the cost of living. Nevertheless, it is felt that hasty and precipitate action is unwarranted and the Federal Council is strongly urged to continue its negotiations towards an equitable settlement.

The President of the Federal Council has further communicated with the Minister, stating:

> It is the unanimous opinion of the Branches that, in view of the abandonment of the previous arrangement regarding rates for attendance, the matter must be considered *de novo*. In determining what are adequate rates of payment the medical profession throughout Australia is firm in the view that, having regard to practical experience of the working of the pensioner scheme, the original rates of 6s. and 7s. 6d. were far too low and represented too great a concession on the profession's part. Indeed many of the profession consider that it is inequitable that medical practitioners should be required to make any concession to the Government. Taking into consideration the customary charges made by the profession in private practice, it is the unanimous view of the Branches that the rates asked for, *viz.*, 10s. 6d. and 12s. 6d., which were the fees charged in private practice thirty years ago, are fair and reasonable and represent a definite concession on the profession's part to the Government. As these rates represent the value which the profession puts on its services to pensioners, it is not proposed to discuss the significance of these figures as asked for in your letter. I therefore respectfully request that you will give earnest consideration to the submission of the Council that as from January 1, 1952, the rates payable to medical practitioners for attendance on pensioners be 10s. 6d. per service at the surgery and 12s. 6d. per service for home visits.

Schedule of Medical Fees under Workmen's Compensation Act.

After negotiation with the Fire and Accident Underwriters Association of South Australia, the Council secured an increase in the medical fees payable under the terms of the agreement for workers' compensation cases, which came into force on November 1, 1951. The fees are more or less on a par with similar increases which have recently taken place in the eastern States, and are more in keeping with the present-day costs of conducting medical practice.

Throughout the period under review several amendments were made to workmen's compensation legislation in the House of Assembly, the most important alteration as far as members of the medical profession are concerned being that which raised the maximum amount of medical expenses allowable under the Act from fifty to seventy-five pounds.

Although this amount is not nearly enough in a large majority of cases, bearing in mind the rapidly increasing and high cost of present-day hospitalization, it will in some small measure assist medical practitioners in the payment of their accounts in full in a number of cases.

Memorial to the Late Dr. Frank S. Hone.

At its meeting on February 7, 1952, the Council of the Branch decided to establish a fund in order to commemorate suitably the work of the late Dr. Hone by reason of the outstanding services rendered by him on behalf of members of the medical profession and the community as a whole.

The late Dr. Hone was one of the first representatives of the Branch on the Federal Council of the British Medical Association in Australia, and throughout his lifetime and through his long connexion with the university his guidance was frequently sought by many newly qualified graduates at the start of their careers, and was readily given at all times. He occupied a unique place in the field of public health and had many other wide interests, and it is felt that his services can best be commemorated by the endowment of a prize bearing his name, to be awarded annually to the student who obtains the highest marks in the medical group of subjects in the final examinations each year.

At the present time the fund has received donations totalling £630, and is still open for receipt of subscriptions, so that any member who may have overlooked the existence of the fund may still contribute to this worthy cause by sending in a donation to the Branch Office. Cheques should be made payable to the "Frank S. Hone Memorial Fund" and forwarded to the Lay Secretary, 178 North Terrace, Adelaide.

Completion of Fifty Years' Membership.

Throughout the year both Sir Henry S. Newland and Dr. F. J. Douglas completed fifty years' continuous membership of the South Australian Branch, and thus became Honorary Life Members as from January 1, 1952.

The Council is fully conscious of the great debt of gratiude which it owes to Sir Henry for the services which he has so willingly given to members of this Branch and the medical profession throughout the Commonwealth over a long period of years, and desires to place on record its sincere congratulations upon this further distinction.

World Medical Association.

At the fifth general assembly meeting of the World Medical Association, held at Stockholm, Sweden, in September, 1951, Dr. L. R. Mallen was elected to the Council of the World Medical Association. The election of Dr. Mallen is a great honour to the South Australian Branch and to the medical profession throughout Australasia, since this is the first occasion when the Australian profession has had direct representation on the Council of the World Medical Association, and the Council tenders its congratulations to Dr. Mallen on this unique achievement.

Honours and Awards to Members of the Branch.

The Council tenders its congratulations to Sir Samuel Burston, on whom His Late Majesty was pleased to confer the honour of Knight Bachelor, and to Dr. F. K. Mugford, who has been promoted to the grade of Officer (Brother) in the Venerable Order of St. John.

Secretariat.

During the year Mr. J. K. Ladyman tendered his resignation as assistant lay secretary, and Mr. W. H. Stephens was appointed in his stead. The Council wishes to place on record its deep appreciation of the work of the secretary, Mr. Dobble, and the assistant secretary during the past year.

(Signed) R. L. THOROLD GRANT,
President.

SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION (INCORPORATED).

Income and Expenditure Account for the Year Ended December 31, 1951.

	£ s. d.		£ s. d.	£ s. d.
To Salaries and Superannuation	1,334 16 10	By Gross Subscriptions		4,287 0 0
„ Postages	123 7 10	City	3,127 5 3	
„ Stationery and Printing	175 16 4	Country	1,082 15 3	
„ Telephone and Telegrams	35 5 2	Students	66 19 6	
„ Rent	73 17 7	Arrears	10 0 0	
„ Legal Expenses	14 14 0	*Less* Deductions from Subscriptions		2,366 17 0
„ Depreciation	31 9 0	British Medical Association, London	848 0 0	
„ Audit Fee	10 10 0	THE MEDICAL JOURNAL OF AUSTRALIA	495 17 6	
„ General Expenses	203 6 4	Federal Council Capitation Fee	636 6 0	
		Library Grant	386 13 6	
		Net Subscriptions		1,920 3 0
		„ Interest		53 10 5
		„ Medical Certificate Books		4 7 0
		„ Deficit—Expenditure in Excess of Income		25 2 8
	£2,003 3 1			£2,003 3 1

Balance Sheet as at December 31, 1951.

LIABILITIES.	£ s. d.	£ s. d.	ASSETS.	£ s. d.	£ s. d.
Sundry Creditors		77 6 11	Furniture and Plant (at cost *less* depreciation)		274 5 9
Listerian Oration (invested as *per contra*)		104 19 9	Delineascope and Projector (at cost *less* depreciation)		9 0 0
British Medical Hall Company, Limited, Building Fund		884 16 7	Lister Medals and Dies (at cost *less* depreciation)		2 0 0
General Fund—			British Medical Hall Company: Share Account (170 Preference, 134 Ordinary)		3,074 10 0
Balance January 1, 1951	4,529 19 10		Australasian Medical Publishing Company, Limited—		
Add adjustment for old account written off:			5% Debentures at cost	30 0 0	
Entertainment Fund £60 1 11			3½% Debentures at cost	1,000 0 0	
Section of Surgery £17 0 0			Advance not yet converted	66 3 1	
State Publicity Campaign £60 11 3					1,096 3 1
Protection of Incomes £10 5 0			Stocks on Hand		74 18 0
£147 18 2			Sundry Debtors—		
Library Account (debit) £103 7 8	44 10 6		British Medical Hall Company	153 14 5	
	4,574 10 4		General	39 6 3	
Less Deficit for year ended December 31, 1951	25 2 8				193 0 8
		4,549 7 8	Special Accounts—		
			Lister Savings Bank	104 19 9	
			Library Savings Bank	1 16 1	
			Building Fund:		
			Savings Bank	290 6 7	
			Commonwealth Bonds	200 0 0	
					597 2 5
			Cash—		
			National Bank of Australia, Limited	46 13 0	
			Commonwealth Bank of Australia	76 12 3	
			Savings Bank of South Australia	171 12 1	
			Cash on Hand	13 8	
					295 11 0
		£5,616 10 11			£5,616 10 11

F. C. W. DOBBIE, Secretary. F. L. WALL, Honorary Treasurer.

AUDITORS' REPORT.

We hereby report that we have examined the Books and Accounts of the South Australian Branch of the British Medical Association, Incorporated, for the year ended December 31, 1951. In our opinion the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the affairs of the Branch as at the above date according to the best of our information, the explanations given to us and as shown by the books produced.

MUECKE, PICKERING AND COMPANY, Chartered Accountants (Aust.),
Auditors.

Adelaide, May 9, 1952.

FINANCIAL STATEMENT.

The financial statement, which is printed herewith, was adopted on the motion of Dr. F. L. Wall, seconded by Dr. C. T. Piper.

ELECTION OF OFFICE-BEARERS.

Dr. A. L. Thorold Grant said that in the absence of further nominations he declared Dr. B. S. Hanson elected President of the Branch for the ensuing twelve months. He invested Dr. Hanson with the badge of office and inducted him to the chair. Dr. Hanson thanked the members for his election.

Dr. B. S. Hanson said that the following had been elected office-bearers for the ensuing year:

Vice-President: Dr. Sholto Douglas.

Honorary Treasurer: Dr. F. L. Wall.

Honorary Medical Secretary: Dr. Roger Angove.

Members of Council: Group A—Dr. E. P. Cherry, Dr. H. G. Prest, Dr. E. L. Symons. Group B—Dr. J. H. Nicholls.

Mr. H. P. Tilley was appointed auditor for the ensuing year.

THE RETIRING MEMBERS OF COUNCIL.

On the motion of Dr. Sholto Douglas, seconded by Dr. D. G. McKay, a vote of thanks was carried to the retiring members of the Council: Dr. G. L. Bennett, Dr. J. M. Pedler, Dr. A. C. McEachern and Dr. G. Viner Smith.

RETIRING PRESIDENT'S ADDRESS.

Dr. R. L. Thorold Grant read his retiring president's address: "The Life and Work of Dr. Esau" (see page 181).

Dr. L. L. Davey proposed and Dr. M. T. Cockburn seconded a vote of thanks to Dr. Grant for his address. The vote was carried by acclamation and Dr. Grant replied.

Out of the Past.

In this column will be published from time to time extracts, taken from medical journals, newspapers, official and historical records, diaries and so on, dealing with events connected with the early medical history of Australia.

AN OPERATION FOR A SUBCLAVIAN ANEURYSM.[1]

Colonial Secretary's Office,
Sydney,
16 March, 1832.

James Bowman, Esq.,
Superintendent of Hospitals.

Sir,

A letter having been addressed to Dr. Bland by the individual named in the margin (John Mullen[2]) now in the General Hospital praying removal to the Benevolent Asylum in order to his undergoing an operation which he states yourself and Dr. Mitchell have declined to perform upon him.

I am directed by His Excellency the Governor to inform you, that the Principal Supt. of convicts has been instructed to proceed to the Hospital for the purpose of ascertaining what Mullen really wishes, and to request that in conjunction with Dr. Mitchell you will have the goodness to accompany Mr. Hely on his visit to the Hospital as above.

I have, &c.,
ALEXR. MCLEAY.

Colonial Secretary's Office,
Sydney,
20 March, 1832.

James Bowman Esq.,
Superintendent of Hospitals,

Sir,

With reference to my letter of the 16th inst. respecting the case of the person named in the margin (John Mullen), a patient in the General Hospital, who is desirous of being discharged to the Benevolent Asylum for the purpose of undergoing an operation at the hands of Dr. Bland.

I am directed by His Excellency the Governor to acquaint you that as Mullen is desirous that the dangerous surgical operation which he wishes to undergo should be performed by Dr. Bland, His Excellency considers that it would not be proper to refuse a compliance with his request and therefore authorises the immediate discharge of Mullen from hospital in order that he may be sent to the Benevolent Asylum or wherever he and Dr. Bland may think proper to have the operation performed.

I have, &c.,
ALEXR. MCLEAY.

[1] From the original in the Mitchell Library, Sydney.

[2] John Mullen, to whom these two letters refer, had a subclavian aneurysm. In 1832 Dr. William Bland tied his innominate artery. He reported the case at length in *The Lancet* with illustrations of the aneurysm and of a special needle he devised to facilitate the ligature of the artery. Mullen died on the eighteenth day after operation.

Correspondence.

THE TREATMENT OF HYPERTENSION.

SIR: I would venture to cross swords with Dr. J. G. Hayden, of Melbourne, concerning his article entitled "The Treatment of Hypertension" in the journal of May 17, 1952. It is stated therein that the error in estimating blood pressure "may be as high as 50 to 90 millimetres of mercury" if certain precautions are not taken, amongst which are: (i) "to be sure . . . that the rubber cuff is applied over the inner side of the arm" and (ii) "to be sure . . . that in obese individuals, the length of the compressing bandage is sufficient to prevent the inflated rubber bag from protruding outside the area of pressure".

A brushing-up of my basic physics (such as Avogadro's hypothesis *et cetera*) failed to convince me that either of these facts would cause a false reading. Accordingly, I deliberately made these mistakes on a number of willing subjects and found absolutely no variation in blood pressure readings from those obtained when the cuff was applied in the normal manner.

Yours, etc.,
PHILIP MCREADY, M.B., B.S. (Sydney).

Migration Office,
Australian Embassy,
Javastraat 1,
The Hague, Holland.
July 14, 1952.

THE CONSERVATIVE TREATMENT OF PERFORATED PEPTIC ULCER.

SIR: My attention has been drawn, belatedly, to Dr. David's letter of April 26, 1952, under the above heading, in which he asks some questions.

Firstly I should state that I am not an "advocate of the conservative treatment", and that I have only followed it in a few selected cases and as a matter of expediency. It is true that the figures of those who are advocates are compelling, but it must be remembered that their cases are somewhat selective, in that where it is considered there is contamination by gross food, surgery is the method of choice.

If there is doubt as to a perforated appendix or any other acute surgical emergency, I agree with Dr. David that immediate laparotomy is the desirable course to pursue. We know that the conservative (Ochsner-Sherren) treatment of appendicitis, by reason of its good results, has its uses, but I could only guess at statistics relating to a hypothetical, non-operative treatment of appendicitis with perforation, utilizing the latest antibiotics.

As to the medico-legal aspect of a case in which a surgeon treated by conservative means a "perforated peptic ulcer" which turned out to be a perforated appendix and died, I can only speculate, as I have not experienced such a misfortune. The taunt that "doctors bury their mistakes" is an old one, and suggests that wrong diagnoses in respect to any complaint do occur, however rarely it may be, and result in the patient's demise. What has befallen the doctor of today in most of these cases, I should think, has been just nothing; the days of fast horses and get-aways seem to have passed!

Dr. David's problem is, perhaps, resolved to some extent by Mr. Justice Kinsella of the Supreme Court of New South Wales, as reported in this journal on May 3, 1952 (King *versus* Stening). To quote: ". . . if there were two authentic schools of opinion upon one aspect of surgery and post-operative treatment, adherence to the one rather than to the other could not amount to negligence."

With the exercise of all reasonable care, the mistake should not be made, and laparotomy should be resorted to if in doubt, or if the conservative treatment is not considered likely to succeed.

Yours, etc.,

Penrith,
New South Wales,
July 27, 1952.

W. F. J. CAMMACK.

SUBACUTE BACTERIAL ENDOCARDITIS CAUSED BY ERYSIPELOTHRIX RHUSIOPATHIÆ.

SIR: With reference to Dr. George Selby's letter published in THE MEDICAL JOURNAL OF AUSTRALIA, dated July 26, 1952, one was rather surprised to find a man, with such brilliant qualifications, so lacking in finesse. When Dr. Selby grows a little further away from his undergraduate days in 1946 he may perhaps learn that it is quite customary to quote an authority to back a contention in any profession.

Yours, etc.,

W. DAVID.

77 York Street,
Sydney,
July 28, 1952.

SUGGESTIONS FOR A NEW TREATMENT OF ULCERATIVE COLITIS.

SIR: Mr. J.B., aged thirty-seven years, a lorry driver, had the signs of ulcerative colitis for eleven years. He had been in hospitals at different times and had had several pathological tests and vigorous treatment. The condition persisted in spite of this.

On October 20, 1950, I commenced with the known textbook treatment, dietary and prescribing *Mistura Catechu et cetera*. I did not order colonic washes or starch and opium enemata as he felt he had had enough at his previous treatments. I saw him at regular intervals and the bleeding *per rectum* was more pronounced and contained a lot of pus and diarrhœa. X ray revealed no neoplasm, but little relief was obtained with "D.C.P.", calcium and *Mistura Catechu*. Early in January this year (1952) I prescribed "Chloromycetin" orally for several days without any effect whatever. The blood and pus, in addition to his severe attack of persistent diarrhœa, was causing him much anxiety.

On February 16, 1952, I decided to alter the course of treatment completely. I gave him daily doses of penicillin intramuscularly and vitamin *K* orally. The whole symptoms stopped almost immediately—no pus, no blood in the stools were seen—and the diarrhœa stopped. The patient continued the treatment with the penicillin injections every two days, and lessened the vitamin *K* doses. Within a week the patient was free from all signs of colitis. I continued the treatment for fear of relapse, giving the penicillin injections once weekly and less strong, and reducing the vitamin *K* almost to nil. The patient now enjoyed good health and had no relapse.

To find out the quantity of penicillin a patient can stand and how much vitamin *K* he can have was my next problem. As far as penicillin is concerned, I am of the opinion that there is no limit in it because the doses he was now having were small, given once a week, going on to longer intervals. But the main question arose: How much vitamin *K* orally would be advisable and for what period? After close examination of all authoritative text-books *re* vitamin *K* in relationship to pathological investigation including biochemical, it appears that their significance is of little value.

I believe that initial blood count, prothrombin index bleeding and coagulation times should be performed, also repeated during and after therapy. A fractional test meal and occult blood in fæces may be of value before and after treatment.

As the patient was now convalescing without any of his symptoms I put him on vitamin B_1. The symptoms reappeared at once the same day. So back I went to his old treatment and the symptoms disappeared completely. It appears that the patient now enjoys freedom from his complaints, almost without vitamin *K* and penicillin.

On my suggestion to have the above tests made—pathological tests at the beginning and end of the treatment—the patient refused, as he had gone through so many during his eleven years' suffering and was content to be without them. I could calculate only the amount of vitamin *K* to be given in this case according to his need, and then cease the treatment.

Now, for over eight weeks, he is free from his symptoms without any appreciable doses of it. It appears that the vitamin *K* given in this case helped the patient, who probably has hæmorrhagic tendencies with lower prothrombin level, but, when given alone on October 26, 1951, failed to relieve his symptoms and had no curative effect on his diarrhœa.

In conclusion, I believe there is ample room for trying this combination, in cases of ulcerative colitis, of oral vitamin *K* with penicillin injections and especially when a patient is willing to submit to pathological tests. When one can safely give him the oral doses of vitamin *K*, stop it and repeat if necessary.

Yours, etc.,

235 Macquarie Street,
Sydney,
June 18, 1952.

G. J. TAHMINDJIS.

Post-Graduate Work.

THE POST-GRADUATE COMMITTEE IN MEDICINE IN THE UNIVERSITY OF SYDNEY.

Higher Degrees and Diplomas.

THE following candidates have passed in examinations for higher degrees and diplomas:

Master of Surgery, Part II: T. R. M. Furber, R. C. Opie, I. F. Potts, R. B. Wiles.

Diploma in Anæsthesia, Part I: K. J. Byers.

Diploma in Dermatological Medicine, Part I: L. G. Abbott, F. J. Collett, R. B. Knox, A. H. McGeoch, B. S. Mackie, Jean Mason-Johnson, Q. J. Taperell.

Diploma in Dermatological Medicine, Part II: M. B. Lewis, A. H. McGeoch, B. S. Mackie, C. T. Petherbridge, F. J. Collett.

Diploma in Gynæcology and Obstetrics, Part I: J. K. L. Marks.

Diploma in Gynæcology and Obstetrics, Part II: R. B. Kendall, J. K. L. Marks.

Diploma in Laryngology and Otorhinology, Part I: S. P. Baker.

Diploma in Ophthalmology, Part I: Zena B. Webster.

Diploma in Ophthalmology, Part II: D. C. C. Hinder, D. T. Treloar.

Diploma in Clinical Pathology: T. Wilkinson.

Diploma in Psychological Medicine, Part I: D. C. Maddison, E. J. A. Nuffield, Clarice M. Smith, D. M. Somerville.

Diploma in Psychological Medicine, Part II: B. H. Peterson, F. J. Scanlan, S. Benedek.

Diploma in Diagnostic Radiology, Part I: B. P. Cahill, G. R. Silvester.

Diploma in Diagnostic Radiology, Part II: B. P. Cahill, G. R. Silvester.

Public Health.

INFECTIOUS DISEASES IN VICTORIA.

THE following extract from the *Victoria Government Gazette* is published at the request of the Victorian Branch of the British Medical Association.

HEALTH ACTS.

Diseases Declared to be Infectious Diseases and Notifiable Infectious Diseases.

Proclamation.

By His Excellency the Governor of the State of Victoria and its Dependencies in the Commonwealth of Australia, &c., &c., &c.

I, the Governor of the State of Victoria, in the Commonwealth of Australia, by and with the advice of the Executive Council of the said State, and by virtue of the powers conferred by the *Health Act*, 1928 (No. 3697), do by this my Proclamation declare:

Acute Rheumatism,
Chorea,
Dengue Fever,
Diarrhœa of forty-eight or more hours duration in children under two years of age,
Filariasis,
Homologous Serum Jaundice,
Infective Hepatitis,
Whooping Cough,

to be infectious diseases and notifiable infectious diseases within the meaning of the Health Acts.

Given under my Hand and the Seal of the State of Victoria aforesaid, at Melbourne, this third day of June, in the year of our Lord one thousand nine hundred and fifty-two, and in the first year of the reign of Her Majesty Queen Elizabeth II.

(L.S.) DALLAS BROOKS.

By His Excellency's Command,

W. O. FULTON,
Minister of Health.

GOD SAVE THE QUEEN!

FIRST SCHEDULE.

EXCLUSION OF PATIENTS AND CONTACTS FROM SCHOOL.

(1) For the purposes of this Schedule—
"School" means any school or pre-school centre;
"Contact" means child of school age or pre-school age living in the same house as the patient;
"Isolated" where applied to a patient means isolated in a hospital, or in any other place (including place of residence) to the approval of the Medical Officer of Health;
"Patient" includes carrier.

Disease.	Patient shall be excluded from School—	Contact shall be excluded from School—	
		Where patient is isolated or where contact is removed to a house where there is no Infectious Disease—	Where patient is not isolated—
Diphtheria	Until a Medical Certificate of freedom from infectivity is furnished. No such Certificate shall be issued until two swabs taken at intervals of not less than forty-eight hours are negative or the organisms have been found to be non-virulent by a pathologist and that such swabs have been taken not less than seventy-two hours after the cessation of administration of chemotherapy or antibiotic agents	Until a Medical Certificate is furnished to the effect that he is not liable to convey infection, this Certificate to be subject to two negative swabs taken at not less than forty-eight hour intervals, provided that where there is no medical attendant the contact may attend school seven days after the last exposure to infection if apparently in good health and free from sore throat or discharge from nose or ears	Until the patient has resumed or might lawfully resume school attendance provided that the contact is then apparently in good health and free from sore throat or discharge from nose or ears
Scarlet Fever	Until a Medical Certificate is furnished that he is not likely to convey infection. No case to be readmitted in less than ten days from onset. Where no Medical Certificate is available readmit four weeks from onset	For seven days after last exposure to infection; but in any case may not return unless apparently in good health and free from sore throat or discharge from nose or ears	For seven days after patient has resumed or might lawfully resume school, but in any case may not return unless apparently in good health and free from sore throat or discharge from nose or ears
Measles	Until a Medical Certificate is furnished stating that he is not liable to convey infection, and until seven days have elapsed since the beginning of the rash. Where no Medical Certificate is available until all traces of rash have disappeared and there is no sign of discharge from ear, eye, or nose; and the patient has no obvious illness, and until fourteen days have elapsed since the beginning of the rash	For twenty-one days after last exposure to infection if attending a Pre-school centre and has not previously had Measles Not to be excluded from any other class of school	
Whooping Cough	Until a Medical Certificate is produced stating that he is not liable to convey infection, and he is in good health. Where no Medical Certificate is available until the expiration of four weeks from the beginning of the whoop	For twenty-one days after last exposure to infection if attending a Pre-school centre and has not previously had Whooping Cough Not to be excluded from any other class of school	
Cerebro-spinal Meningitis	Until recovered from illness and is apparently in good health	Until a Medical Certificate is produced certifying that approved prophylactic treatment has been given or seven days after last exposure to infection if apparently in good health	
Polioencephalitis, poliomyelitis, and encephalitis (lethargic)	Until a Medical Certificate of freedom from infectivity is furnished or fourteen days after clinical recovery	For fourteen days from last exposure to infection	
Typhoid Fever	Until a Medical Certificate of freedom from infectivity following three negative urine and fæces cultures at intervals of seventy-two hours following a cholagogue is furnished	Not to be excluded unless pending investigation required by Medical Officer of Health	
Varicella	For fourteen days after the beginning of the illness	Not to be excluded	
Mumps	For fourteen days after the beginning of the illness	Not to be excluded	
Rubella (German Measles)	Until Medical Certificate of recovery is furnished. Where no Medical Certificate is available, until seven days have elapsed since the beginning of the rash	For twenty-one days after last exposure to infection if attending a Pre-school centre and has not previously had Rubella Not to be excluded from any other class of school	
Influenza	Until all symptoms of the disease have disappeared and the patient has no obvious illness	Not to be excluded	

And the Honorable William Oliver Fulton, Her Majesty's Minister of Health for the State of Victoria, shall give the necessary directions herein accordingly.

A. MAHLSTEDT,
Clerk of the Executive Council.

Obituary.

ADRIAN ODILLO MAHER.

WE are indebted to Dr. Arthur D'Ombrain for the following appreciation of the late Dr. Adrian Odillo Maher.

Adrian Odillo Maher, a man who carried on the torch of his father and brother in the practice and principles of ophthalmology, graduated from the University of Sydney in 1927. A student and a resident of Saint Vincent's Hospital, he completed his studies in London, obtaining the diploma in ophthalmic medicine and surgery of the conjoint Colleges.

Soon after his return, he was appointed to the honorary staff of the Mater Misericordiæ Hospital. For twenty-two years his strong and kindly presence pervaded and dominated the ophthalmic department of a great hospital. His name and the memory of his good works will not die in these parts. In the words of a poet: "He was well known round here."

For six years I was Adrian's colleague at the Mater Misericordiæ Hospital. He had been sick for some time before his illness made him too weak to attend the hospital he had served so long and well. No one knew up to then.

He was a man of remarkable humility, never pushing himself forward and not, alas, thinking his views and knowledge worthy of publication. It is customary and right that we speak well of our friends that have preceded us across the Great Divide, especially of one *"qui ante diem periit"*, but never in my thirty years as an ophthalmic surgeon have I known a man with such a comprehensive knowledge of ophthalmology in all its branches. Older in years and in experience than Adrian, I have many times benefited by his amazing knowledge and clinical acumen, always freely though modestly put at the disposal of his colleagues.

A man of strikingly handsome appearance and of an equally striking common-sense approach to his patients' and his colleagues' problems, he inspired confidence in all who met him, a confidence that was never misplaced, for he was incapable of unkindness or insincerity.

He lived for these things: his Faith, his family and his profession. And, the final proof of a man, he exemplified, in R. L. Stevenson's words: "That finest trait of humankind, disdain of the inevitable end."

The sympathy of all who knew him goes out to his devoted wife and family.

"A very gallant gentleman."

Dr. Peter A. Rogers writes: It was my good fortune to meet Adrian Odillo Maher whilst I was a resident medical officer at the Mater Misericordiæ Hospital. It was he who fostered and stimulated my interest in ophthalmology, and he spent many hours explaining the interesting cases and the fundamentals of refraction. I feel that I was privileged indeed, as he continued to maintain this interest until his recent sickness. Our association remained a close one, right up to his untimely death.

He may have had equals in medical ophthalmology, but I do not believe he had any peer. One of his habits was to dissect all the current ophthalmological literature, and this he did in a most refreshing manner. He carried his knowledge humbly, but was always ready and willing to give most useful advice and opinion. He was a fine teacher, true friend and gentleman. He gave outstanding service for over twenty-one years to the Mater Misericordiæ and Saint Vincent's Hospitals. The extraordinarily courageous manner in which he faced the inevitable end was no surprise to those who knew and loved him well. He is survived by a devoted wife, Sari, and three fine children, Adrian, Jill and Bill. To them we extent our very deepest sympathy.

JAMES CALHOUN.

WE regret to announce the death of Dr. James Calhoun, which occurred on July 22, 1952, at Donald, Victoria.

ROLAND JAMES POPE.

WE regret to announce the death of Dr. Roland James Pope, which occurred on July 26, 1952, at Sydney.

DISEASES NOTIFIED IN EACH STATE AND TERRITORY OF AUSTRALIA FOR THE WEEK ENDED JULY 12, 1952.[1]

Disease.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Australian Capital Territory.	Australia.
Acute Rheumatism	..	..	..	..	..	..	..	..	..
Amœbiasis	..	..	..	..	..	..	..	..	..
Ancylostomiasis	..	..	..	..	..	..	..	..	..
Anthrax	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..
Brucellosis	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..
Chorea (St. Vitus)	..	..	..	..	..	..	..	..	..
Dengue	..	..	..	..	..	..	..	..	..
Diarrhœa (Infantile)	..	..	13(8)	..	..	..	1	..	14
Diphtheria	5(2)	2(2)	..	..	3(3)	..	..	..	10
Dysentery (Bacillary)	..	2(1)	8(8)	1(1)	..	..	..	..	11
Encephalitis	..	1	1	..	..	..	..	..	2
Filariasis	..	..	..	..	..	..	..	..	..
Homologous Serum Jaundice	..	..	..	..	..	..	..	..	..
Hydatid	..	..	..	..	..	4	..	..	4
Infective Hepatitis	..	..	..	..	13(6)	..	..	..	13
Lead Poisoning	..	..	..	..	..	..	..	..	..
Leprosy	..	..	1	..	..	1	..	..	2
Leptospirosis	..	..	2(1)	..	..	..	..	..	2
Malaria	..	..	..	..	..	..	..	..	..
Meningococcal Infection	1	6(2)	..	..	2(2)	2(1)	..	..	11
Ophthalmia	..	..	..	..	..	..	..	..	..
Ornithosis	..	..	..	..	..	..	..	..	..
Paratyphoid	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..
Poliomyelitis	1(1)	5(1)	3(1)	5(4)	1	1	..	..	16
Puerperal Fever	..	..	1	1	..	..	..	..	2
Rubella	..	10(4)	1(1)	..	1(1)	..	..	..	12
Salmonella Infection	..	..	..	..	..	..	..	..	..
Scarlet Fever	19(5)	20(13)	26(25)	2(1)	3(3)	21(8)	..	..	91
Smallpox	..	..	..	..	..	..	..	..	..
Tetanus	..	..	..	..	..	..	..	..	..
Trachoma	..	..	..	..	..	..	..	..	..
Trichinosis	..	..	..	..	..	..	..	..	..
Tuberculosis	36(21)	18(11)	19(17)	9(7)	10(8)	8(3)	..	..	100
Typhoid Fever	..	..	1	..	..	..	..	..	1
Typhus (Flea-, Mite- and Tick-borne)	..	..	..	..	..	..	..	..	..
Typhus (Louse-borne)	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..

[1] Figures in parentheses are those for the metropolitan area.

CEDRIC KEITH COHEN.

We regret to announce the death of Dr. Cedric Keith Cohen, which occurred on July 26, 1952, at Double Bay, New South Wales.

HENRY GEORGE CAULFIELD.

We regret to announce the death of Dr. Henry George Caulfield, which occurred on July 27, 1952, at Dalwallinu, Western Australia.

Medical Appointments.

The following have been appointed members of the Advisory Committee under the provisions of the *Hospitals Act*, 1934-1951, for South Australia: Dr. G. H. Burnell, Dr. K. S. Hetzel, Dr. B. H. Swift, Dr. G. A. Lendon and Dr. A. H. Lendon.

Dr. W. M. G. Leembruggen has been appointed public vaccinator for the Shire of Beechworth, Victoria.

Dr. T. W. Jenkins has been appointed public vaccinator for the town of Castlemaine, Victoria.

Dr. S. B. Sutton has been appointed public vaccinator for the city of Melbourne.

Dr. B. Hiller, Dr. T. G. H. Hogg and Dr. R. Wall have been appointed members of the Medical Council of Tasmania.

Dr. J. F. J. Cade has been appointed superintendent of the Mental Hospital and Receiving House, Royal Park, Victoria.

Dr. E. M. Miller and Dr. W. J. Freeman have been appointed members of the Mental Deficiency Board of Tasmania.

Dr. C. M. Deland has been appointed an officer of health under the provisions of the *Health Act*, 1935-1951, South Australia.

The following appointments have been made to the honorary medical staff of the Royal Alexandra Hospital for Children, Camperdown, New South Wales: honorary assistant physician, Dr. G. M. Blaxland; honorary relieving assistant physician, Dr. Judith E. Dey; honorary radiologist, Dr. A. Owen; honorary assistant radiologist, Dr. R. H. Kenny; honorary relieving assistant surgeon, Dr. A. W. Middleton; honorary ophthalmic surgeon, Dr. R. L. Raymond; honorary assistant ophthalmic surgeon, Dr. J. Pendergast; honorary associate physician, Dr. Gertrude C. Geikie.

The following appointments have been made at the Royal Adelaide Hospital: honorary senior assistant radiologist, Dr. R. de G. Burnard; honorary dermatologist, Dr. A. J. Hakendorf.

Dr. T. L. McLarty has been appointed a member of the Board of Optical Registration for South Australia.

Australian Medical Board Proceedings.

TASMANIA.

The following have been registered, pursuant to the provisions of the *Medical Act*, 1918, of Tasmania, as duly qualified medical practitioners: Skein, Marie Joyce, M.B., B.S., 1951 (Univ. Sydney); Graves, Alexander Mailer, M.B., B.S., 1951 (Univ. Melbourne).

AN HONOUR FOR DR. K. W. STARR.

Dr. Kenneth W. Starr has been invited to lecture before the Mayo Foundation on October 3, 1952, and has accepted. His subject will be: "Experiences with Internal Biliary Drainage in the Surgery of the Common Bile and Pancreatic Ducts." He has also been appointed Hunterian professor of the Royal College of Surgeons, England, and will give a Hunterian Oration in London on October 21, 1952. His subject will be "Acute Dilatation of the Stomach (Potassium Therapy in its Relation to Gastric Surgery)". We congratulate Dr. Starr on his double honour, which is also an honour to Australian surgery.

Nominations and Elections.

The undermentioned have applied for election as members of the New South Wales Branch of the British Medical Association:

Gillespie, James Albon, M.B., B.S., 1951 (Univ. Sydney), Base Hospital, Tamworth, New South Wales.

Coventry, Keith John, M.B., B.S., 1947 (Univ. Sydney), Flat, 3, 9 Moruben Road, Mosman, New South Wales.

Diary for the Month.

AUGUST 12.—New South Wales Branch, B.M.A.: Executive and Finance Committee.
AUGUST 18.—Victorian Branch, B.M.A.: Finance Subcommittee.
AUGUST 19.—New South Wales Branch, B.M.A.: Medical Politics Committee.
AUGUST 20.—Western Australian Branch, B.M.A.: General Meeting.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

New South Wales Branch (Medical Secretary, 135 Macquarie Street, Sydney): All contract practice appointments in New South Wales.

Victorian Branch (Honorary Secretary, Medical Society Hall, East Melbourne): Associated Medical Services Limited; all Institutes or Medical Dispensaries; Australian Prudential Association, Proprietary, Limited; Federal Mutual Medical Benefit Society; Mutual National Provident Club; National Provident Association; Hospital or other appointments outside Victoria.

Queensland Branch (Honorary Secretary, B.M.A. House, 225 Wickham Terrace, Brisbane, B17): Brisbane Associated Friendly Societies' Medical Institute; Bundaberg Medical Institute. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL or position outside Australia are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.

South Australian Branch (Honorary Secretary, 178 North Terrace, Adelaide): All Contract Practice appointments in South Australia.

Western Australian Branch (Honorary Secretary, 205 Saint George's Terrace, Perth): Norseman Hospital: all Contract Practice appointments in Western Australia. All government appointments with the exception of those of the Department of Public Health.

Editorial Notices.

MANUSCRIPTS forwarded to the office of this journal cannot under any circumstances be returned. Original articles forwarded for publication are understood to be offered to THE MEDICAL JOURNAL OF AUSTRALIA alone, unless the contrary be stated.

All communications should be addressed to the Editor, THE MEDICAL JOURNAL OF AUSTRALIA, The Printing House, Seamer Street, Glebe, New South Wales. (Telephones: MW 2651-2.)

Members and subscribers are requested to notify the Manager, THE MEDICAL JOURNAL OF AUSTRALIA, Seamer Street, Glebe, New South Wales, without delay, of any irregularity in the delivery of this journal. The management cannot accept any responsibility or recognize any claim arising out of non-receipt of journals unless such notification is received within one month.

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